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Harvard Medical

ALUMNI BULLETIN SUMMER 1997

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Harvard Medical

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Photo by John B. Levine '79

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This being America, our issue we planned to be about food really turned out to center on our cultural nemesis, fat. This happens to be one of our editor-in-chief's early interests, so William Ira Bennett '68 leads us off with his intriguing update on the real culprit behind why willpower doesn't work in reducing body fat.

Janet Walzer, associate editor, gives us some cultural context on an obsession turned out of control—eating disorders—and what the relatively new Harvard Eating Disorders Center is doing to illuminate these illnesses. John Stoeckle '47 illustrates how the professional eating life of physicians has changed since he was a medical student. And we're treated to some more nostalgia by John Levine '79, who describes the psychological appeal of something that is obviously one of his passions: the diner experience.

These are historic times at the medical school, what with the changing of the guard. Sarah Jane Nelson, assistant editor, sought the dusty tomes for information on the “men who would be dean,” which we put into a timeline (greatly assisted by Madeline Mullin, photo archivist in Rare Books). Bill Bennett and I divided the pleasures of interviewing the current and future deans. (Sarah must have had enough of the men, because she subsequently gave birth to baby Emma on June 7.)

Another way of crafting a new life is described by Lakshmi Halasyamani '94 who, while in India, interviewed women who are learning how to earn their way to better life and health. Unforgettable is an account by Morris Fisher '65 about the loss of his son, who became addicted to a migraine medication. His classmate William D. Clark '65 offers suggestions on how physicians can better recognize and intervene when addiction is suspected.

Ellen Barlow

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Letters

Changes at the Judge Baker

In the Spring 1997 issue there is an interesting story on Harvard affiliated hospitals. As part of that article, you make reference to the "Judge Baker Guidance Center, part of Children's." Although at one time we were just that, many things have changed at Judge Baker in the past few years.

We are now called the Judge Baker Children's Center and are no longer part of Children's Hospital. Once we had our own president and board of trustees in place, it seemed appropriate to also have our own separate identity as one component sub-department of the Harvard Medical School Consolidated Department of Psychiatry. However, we do have many fruitful collaborations with organizations including Children's Hospital, Harvard Medical School, Harvard University and Harvard Law School.

Judge Baker Children's Center is a multi-faceted "center" devoted to carefully evaluated prevention and interventions designed to promote healthy development, avert consequences of risk exposure, and treat children and families who have serious difficulties in school and in relation to trauma.

These efforts occur through clinical developmental research programs focused on families and children, as well as through cutting edge interventions at the local (e.g., collaborations with the Boston Public Schools) and national levels (our media center).

*Stuart T. Hauser, MD, PhD
President, Judge Baker Children's
Center*

Final Decisions

I was touched by the *Inside HMAB* column and the O'Connell article in the last issue of the *Bulletin*. It is noteworthy that there is (in this issue and indeed in most of the voluminous literature on this subject) little discussion of physicians' use of suicide or euthanasia when they or their spouses are mortally ill.

I have been the physician or major consultant for a number of physicians, their spouses and medical students (more than 15) who were afflicted with illnesses that were incurable. Most of them actively ended their lives, usually with drugs. In my judgment these actions (with my support) were appropriate responses to the inadequate relief of pain and suffering from the treatment available and offered to them, or to the occurrence of intolerable side effects from the drugs employed, usually morphine.

It seems unfair that physicians would prohibit the use of modalities (of treatment) for their patients that are available to themselves. We need more data to determine what physicians do with their own illnesses and why.

We need time and much discussion before final decisions are made in this area. Physicians do not know their patients as well as they were able to know them in my era of active practice. There are no longer the days or weeks of contact we had so routinely. Home visits are not made. Office visits in managed care are impossibly short. Decisions so final have to be made slowly, with much deliberation and as openly as possible.

I have discussed this matter with Harold Bursztajn '76 many times. I think we agree that legalization of assisted suicide is not possible at this time. Decriminalization may be the best course. In the meantime current practice should be identified.

*A. Stone Freedberg, MD
Professor of Medicine Emeritus, HMS*

Oriol Named Associate Dean for Student Affairs

Nancy Oriol '79, who was highlighted in the last issue as the founder of the Family Van, has been appointed the next associate dean for student affairs. She will serve simultaneously as associate master of the Holmes Society.




For the past 14 years, Oriol has held an appointment in anesthesiology at Beth Israel Hospital, where she is now chief of obstetrical anesthesia. She will continue to work part time at the Beth Israel Deaconess Medical Center and to be the executive director of the Family Van program.

She succeeds Ed Hundert '84, who is leaving after seven years in this position to become the senior associate dean for medical education at the University of Rochester School of Medicine and Dentistry.

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Harvard's New Provost

Harvey V. Fineberg '71, dean of the Faculty of Public Health, is Harvard University's next provost. Fineberg will succeed Albert Carnesale, who leaves Harvard at the end of June to become chancellor of the University of California at Los Angeles.

The role of the provost is to be a "partner" to the president. As provost, Fineberg's key priorities will include strengthening transfaculty initiatives, improving the coordination of international programs across faculties, enhancing administrative efficiency in central university functions, and seeking better ways to incorporate information technology into educational programs across the university. Transfaculty initiatives include ethics and the professions; children and schooling; the environment; mind, brain and behavior; and health policy. The Harvard AIDS Institute is another example of a program that engages faculty from different parts of the university.

"Harvey Fineberg is an experienced and successful academic leader who has ably guided the School of Public Health through a time of unprecedented growth as well as fundamental changes in health care needs," Rudenstine said during his announcement. "He has extensive knowledge of Harvard and its different parts; he has a talent for bringing people together to work toward common ends; and he has a quality of judgment that is both rigorously analytical and deeply humane."

James Ware, Frederick Mosteller Professor of Biostatistics and dean for academic affairs, will serve as the HSPH's acting dean. Meanwhile, President Rudenstine and his faculty advisory group have begun an international search for Fineberg's successor.

photo by Liza Green



Harvey Fineberg

Soma Weiss Day

Soma Weiss was not only one of Harvard's great researchers and clinicians, but is also remembered as the consummate teacher. Weiss, who came from Hungary as a college student and graduated from Cornell with an MD in 1923, began his Harvard tenure in 1925. In 1940 he was appointed the Hersey Professor of the Theory and Practice of Physic, the oldest professorship at Harvard.

Each year Soma Weiss's teaching and scholarship are honored on Soma Weiss Student Research Day, when students display their research projects to faculty and fellow students. This year, on April 24, there were approximately 100 student poster presentations, more than previous years. The research projects represented a broad

spectrum—from angiogenesis and tumor growth to children's health and "suicide by cop." As with previous years, four students were chosen by a group of representatives from each of the academic societies to give ten-minute speeches about their research projects.

In his keynote address Dean Tosteston spoke about the future of biomedical science, including his belief that some of the most exciting research will relate to the brain/mind and relationships between genes. He also paid tribute to the work of the students and their own role in the future: "Where are we going? Your guess is certainly as good, and probably better, than mine."





photo by Justin Knight

Happy Anniversary

In February more than 800 nurses attended a conference to celebrate the 20th anniversary of the Nurses' Health Study, the first widescale longitudinal study to examine women's health issues. Funded by the NIH, researchers from HMS, Brigham and Women's

Hospital and Harvard School of Public Health have explored such topics as the effects of estrogen-replacement therapy, diet and exercise, and the relationship among oral contraceptives, cigarettes and significant illness. Information was gathered from over 120,000 registered nurses between the

ages of 30 and 55, who filled out questionnaires every other year. More than 200 articles have been published from this study, which also spawned Nurses Health Study II in 1989, adding nurses 25 to 45 years of age.



Every year second-year students get the chance to turn HMS on its head in the Second-Year Show. This year's show, "Gone with the Dean," focused

on finding a replacement for Dean Tosteson. Borrowing from the typical beauty pageant set-up, Dean Federman served as host as HMS

characters such as Judah Folkman, Betty Hay and Dan Goodenough competed for the deanship. In a quirky plot twist Dean Tosteson was kidnapped,

resulting in the competitors' banding together to find the missing dean.

Two dollars of each ticket were donated to Rosie's

Place, an agency that assists disadvantaged and homeless women in Boston.

Ideal Matches

According to Edward Hundert, associate dean for student affairs, Match Day 1997 was another incredible success, despite the fact that this was the second largest graduating class in HMS history, numbering 188 students. As usual, approximately half the class will remain at HMS for their residencies, while the rest will leave for other programs across the country. This year, the most popular specialty choices, in descending order, were internal medicine (34%), pediatrics (13%), general surgery (9%) and orthopedic surgery (7%). On the other end of the scale, one student each went into anesthesiology, family practice and urology. Eight graduating students chose to defer their internships this year, the MD/PhDs to pursue basic research careers and the other students to pursue international health fellowships before returning to clinical training the following year.



Match Day photos by Justin Knight

ANESTHESIOLOGY

Edward O. O'Brien
University of California, San Francisco

CLINICAL MEDICINE

Stephen Swanson
Red Cross Pediatric Hospital, Cape Town,
South Africa

DERMATOLOGY

Macrene Alexiades
New York University Medical Center, NY

Alice Barba
Jackson Memorial Medical Center,
Miami, FL

Amol Doshi
UC/San Diego Medical Center, CA

Shlomit Halachmi
Boston Medical Center, MA

Saeed Jaffer
Boston Medical Center, MA

Graeme Lipper
Massachusetts General Hospital

Nadia Satya
Emory University School of Medicine,
Atlanta, GA

Kerry Wong
Cambridge Hospital, MA
Massachusetts General Hospital

EMERGENCY MEDICINE

Katherine Awad
Harbor-UCLA Medical Center, Torrance,
CA

Peter Bakes
Harbor-UCLA Medical Center, Torrance,
CA

Beverly Brown
St. Lukes-Roosevelt Hospital Center, New
York, NY

Frantz Gibbs
Rhode Island Hospital, Providence

Andrew Reisner
Brigham and Women's, Boston

Richard Rhee
Harbor-UCLA Medical Center, Torrance,
CA

Geraldine Stratton
UCLA Medical Center, CA

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St. Lukes Medical Center, Milwaukee, WI

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Barnes-Jewish Hospital, St. Louis, MO

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Presbyterian Hospital, New York, NY

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Beth Israel Deaconess Medical
Center/ East
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Massachusetts General Hospital

Chrysoula Dosiou
University of California, San Francisco

Seth Field
Hospital University of Pennsylvania,
Philadelphia

Bard Geesaman
Massachusetts General Hospital

David Grayzel
Massachusetts General Hospital

Nadia Hansel
Hospital University of Pennsylvania,
Philadelphia

Michele Heisler
University of Michigan Hospitals, Ann Arbor

Deborah Hung
Brigham and Women's, Boston

Samah Jafari
University of Massachusetts Programs, Worcester, MA

Ashish Jha
University of California, San Francisco

Sekar Kathiresan
Massachusetts General Hospital

Dennis Kim
Brigham and Women's, Boston

Lisa Korn
Mt. Sinai Hospital, New York, NY

Steve Lee
UCLA Medical Center

Felice Lepar
Hospital University of Pennsylvania, Philadelphia

Mona Lin
Stanford Health Service, CA

Elena Martinez
Brigham and Women's, Boston

Samia Mora
Massachusetts General Hospital

Girish Narayan
Presbyterian Hospital, New York, NY

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Yngvild Olsen
Boston University Medical Residency Program, Boston, MA

Shona Pendse
Beth Israel Deaconess Medical Center/West Boston, MA

Scott Podolsky
Brigham and Women's, Boston

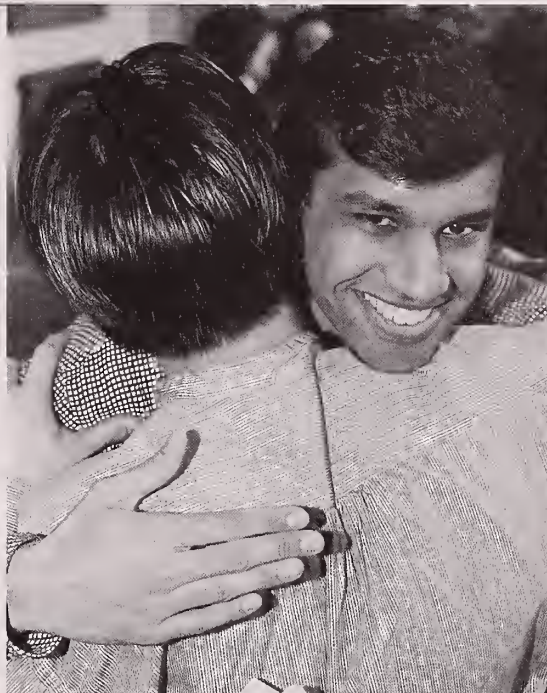
Jesus Rame
University of Texas Southwest Medical School, Dallas

Joell Reiter
Massachusetts General Hospital

Jonathan Rosenberg
New York Hospital, NY

Mitchell Ross
Beth Israel Deaconess Medical Center/East Boston, MA

Suzanne Sims
Stanford Health Services, CA



David Sloane
Beth Israel Deaconess Medical Center/West Boston, MA

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Ben Stanger
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Presbyterian Hospital, New York, NY

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O B / G Y N

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Gillian Dean
University of California, San Francisco

Tina Jackson
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Martha Penglase
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Erika Gantt
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Esther Dechant
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Boston Combined Pediatric Residency,
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Wendie Beck
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Heidi Blume
University of Washington Affiliated
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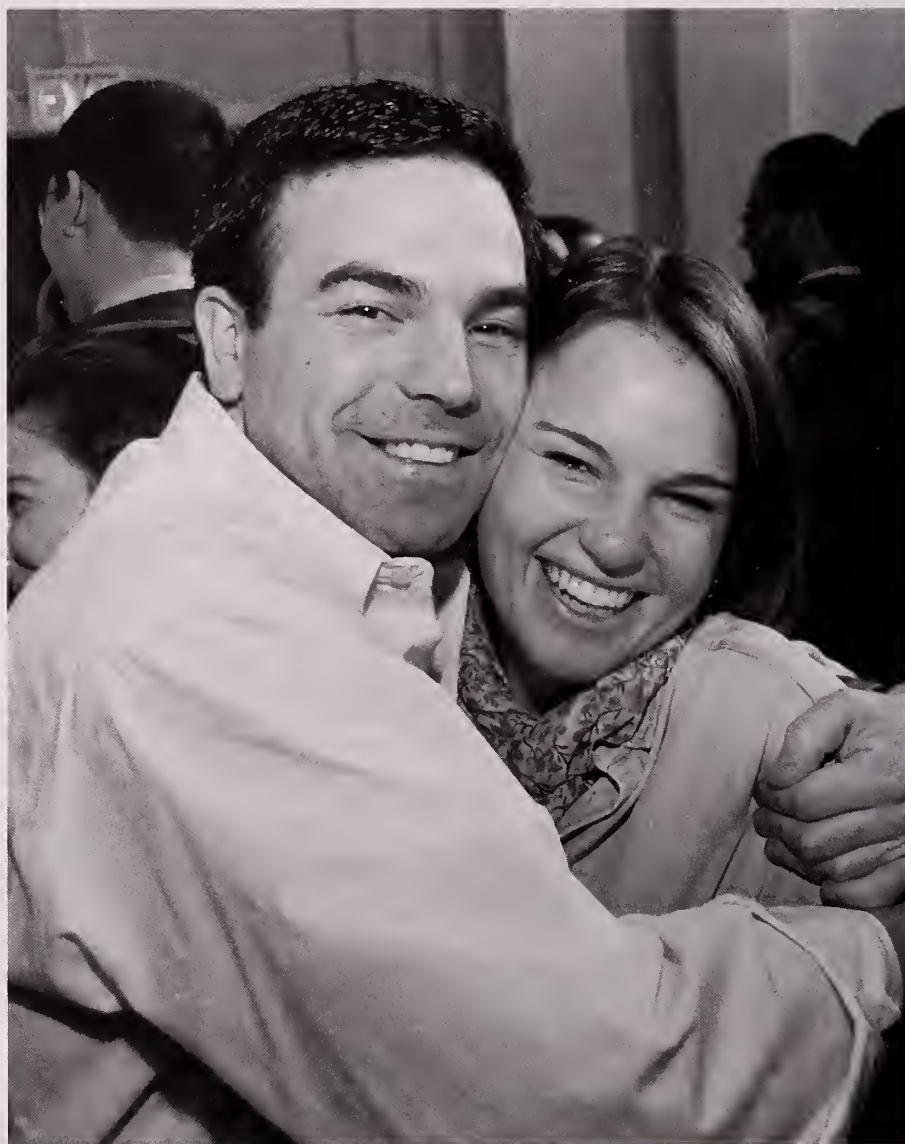
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Book Mark

SURGERY AT NEW ENGLAND

DEACONESS HOSPITAL

William V. McDermott

Francis A. Countway Library of
Medicine, Boston, 1996

by *Cornelius E. Sedgwick*

This book is beautifully written and illustrated by William V. McDermott '42 who was personally involved in the Harvard Medical School Fifth Surgical Division at the Boston City Hospital, and the Department of Surgery at the New England Deaconess Hospital. He records in detail the origins, growth and consolidation from 1896 to 1985 of the New England Deaconess Hospital from a 16-bed hospital to a major teaching hospital. It is not only an historical account of the changes that took place in surgery there and at Boston City Hospital, but of the changes occurring in medicine and surgery in that era.

The book centers on the leaders that gave direction to the changes, and includes short, interesting biographical resumes and photographs of them. Many times the narration wanders from the history of surgery of the New England Deaconess Hospital to the history of the Fifth Surgical Division of the Boston City Hospital and Harvard Medical School. This reveals the deep devotion of the author to these institutions. The relating of such instances as the Muhammed Ali fiasco has little to do with the development of the surgical department of the New England Deaconess Hospital, but it will bring fond memories to the alumni of the Boston City hospital who were on staff at the time.

The greatest changes occurred in the years of transition, 1985 to 1995, when it changed from a private hospital to a major teaching hospital. The New England Deaconess Hospital

offered excellent nursing care and facilities. Many academic-oriented surgeons from Boston City Hospital as well as other teaching services preferred New England Deaconess Hospital for their private patients. The patients were cared for by a postfellowship house service and teaching was by the old preceptor method, except for pathology. There was little research.

The trustees of the NEDH realized that an affiliation with a university medical school was the best path for the future. The Fifth Harvard Division's withdrawal from Boston City Hospital provided the opportunity for the New England Deaconess Hospital to become a teaching hospital. The transfer of the Fifth Harvard teaching service of the Boston City Hospital to the New England

Deaconess Hospital was accomplished.

The trustees of Harvard Medical School and some of the surgeons of the New England Deaconess Hospital favored this transition, but as the author emphasizes, many strongly resisted. The idea of possible group practice with salaried staff was vigorously opposed by members of the general staff; interestingly, the early survival of the New England Deaconess Hospital was possible because of its long association with group practice salaried physicians and surgeons from Lahey, Joslin and Overholt clinics. Ironically, a few decades later, the new chairman of the Department of Surgery, Glenn Steele, successfully formed a salaried group practice.

Today, the Deaconess Hospital, which has just merged with the Beth

Surgery at New England Deaconess Hospital



1896–1985

and Its Roots in the
Harvard Surgical Service
at the Boston City Hospital

Book Mark

Israel Hospital, is a strong major teaching hospital of Harvard Medical School, with outstanding residencies in most specialties. There is a major focus on research. The last part of the book speaks of the accomplishments of its staff and past residents. This narrative will be enjoyed by surgeons of this era, particularly those close to Harvard Medical School, the Boston City Hospital and the Deaconess Hospital.

Cornelius E. Sedgwick is HMS clinical professor of surgery emeritus and chairman emeritus of the Department of Surgery, New England Deaconess Hospital.

VIOLENCE: OUR DEADLY EPIDEMIC AND ITS CAUSES

by James Gilligan, MD
Grosset/Putnam, New York, 1996

by *Elissa Ely*

Internship is not a famous time for compassion. I had none that early morning in the emergency room when an inmate serving a murder sentence arrived from a maximum-security prison. He had forced a paperclip high into his urethra—again—and sat grimacing on his cot during the exam. X-rays were taken, an annoyed urologist consulted, and the patient eventually transferred—as usual—to another hospital for paperclip removal. I remember looking at the X-ray with unsympathetic horror. I couldn't comprehend the self-destructiveness, but I felt clearly that if a man had such little concern for his own well-being, I was not obligated by the Hippocratic oath to part with any concern of my own.

When I began *Violence: Our Deadly Epidemic and Its Causes* by James Gilligan, MD, HMS clinical instructor in psychiatry, I expected a book full of descriptive tales of my patients' compatriots: grotesque men who had committed grotesque deeds, and deserved what the state had given them. Gilligan, the former medical director of Bridgewater State Hospital for the criminally insane, has spent his career examining and treating violent offenders. "I have written this book to offer myself as your guide on a journey into the universe of violence," he explains. But this is not a typical (or stereotypical) beefy prison guide on a bitter and vengeful tour.

As he describes them, the men who found their way into Gilligan's state hospital office are "the living dead," extinguished selves without physical or emotional sensations that might assure

them they existed (or at least, that they might hope to). "They kill in part because they cannot stand to think others are alive while they are not," he writes.

These are men who brutalize not only their victims but—like my patient—themselves, because pain is the only feeling they can still experience. "I have seen Oedipus," our guide writes, "a man who killed his father and then blinded himself."

Invariably, violent men have felt violence before they inflicted it. "Violence, like charity, begins at home," Gilligan explains. There is the prisoner whose mother "spanked" him by shooting him with a pistol, and the one whose parents beat him with an ax and set him on fire. An ill but understandable homeostasis—which Gilligan calls "the logic of shame"—results: the worse a man was treated in childhood, the worse an adult offender he becomes. A starved and dying self, driven by shame, is left with nothing but "the overbearing need to prevent others from laughing at oneself by making them weep instead." As the author chillingly argues, in eight aphoristic words that surely required all his 25 years of experience to condense: "all violence is an attempt to achieve justice."

We—the community—collude in this misguided cowboy justice, by responding to criminal violence with violence of our own. There is an ironic symmetry in the motives of the lawful and the lawless: covertly on one side and overtly on the other, each strives for vindication, in the form of humiliation and dominance. "Punishment is that collective violence which any society defines as legal," he writes.

We operate, says Gilligan, under a false moral equation: if criminals are evil, then eliminating a man eliminates the evil. He suggests the time has

VIOLENCE

Our Deadly Epidemic and Its Causes

James Gilligan, MD

come to ditch this paradigm ("three thousand years should be an adequate length of time to test any hypothesis") and turn instead to a public health model, with its emphasis on prevention instead of retribution. "Attempting to repair the damage, whether by means of punishment or treatment...is too little too late." He proposes a "germ theory of violence," one that includes a pathogen (shame) and a vector (the relative economic deprivation of the "lower classes" by the "upper" ones). Here he becomes frankly political, arguing that in America, land of self-congratulation, violence prevention is limited by lack of desire more than lack of ability. He also becomes a bit dreamy, lobbying

for the construction of a classless society with "a more equitable and hence less shame-inducing socioeconomic system." Less class miserliness and more sharing of collective wealth, he writes, could "for all practical purposes eliminate human violence from the face of the earth."

After 25 years amongst men without hope, Gilligan emerges a hopeful physician and a hopeful philosopher. After 25 years amongst men filled with hate, he can still muse without hatred.

"I have been writing this book all my life," he tells us in the fine print of acknowledgements, and though we may not agree with what he thinks, we must be grateful to him for having thought it. In an age that may be

remembered for punitive conservatism, it is brave and unfashionable to argue a case for understanding the criminal in order to prevent the crime.

Elissa Ely '88 is a practicing psychiatrist and book review editor for the Harvard Medical Alumni Bulletin.

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On the Quad



New Chair of Alumni Fund

In 20 years of an active role with HMS alumni, I have never had a happier moment than to announce the appointment of Tenley Albright as chairman of the Alumni Fund. I've known Tenley for more than 30 years. Indeed, she was in the class the first time I presented a formal talk as a faculty member, enrolled at the Massachusetts General Hospital. I remember that she asked a very thoughtful and probing question then, and it is obvious that she is still doing so.

Tenley Albright's contributions to medicine are many. She has been active in the national scene in promoting women's health. She has spoken out forcefully against the devastating potential of landmines. And she has participated in exciting research on the long range benefit of athletic training on a reduced risk of breast cancer, heart disease and diabetes.

In short, as a doctor, a scholar, and a national figure, Tenley Albright is the ideal person to join the distinguished lineage of chairs of the Harvard Medical Alumni Fund.

Daniel F. Federman '53

Her mother always accuses her of never going anywhere in Boston without first going down Avenue Louis Pasteur. So it was impossible for Tenley E. Albright '61 to resist the invitation to serve the institution she loves as chair of the Alumni Fund. Her hesitation, she says, was that she never thought of herself as a fundraiser. To get around this stumbling block, a friend suggested that she take the "d" off fund and make it fun.

"I felt honored to even be considered to follow my beloved professors and mentors, Dr. Joe Murray and Dr. Cliff Barger," says Albright, who already has ideas for how to make her new "job" fun. For one, she plans to come up with ways to encourage stronger links between alumni and the medical school. "We all have deep-in-the-heart links, but it's hard to find out what's going on here without being on the Quadrangle," she says. "There are any number of different things that might intrigue us, but we don't realize we can come and sit in on a lecture and even fear we might not understand today's lectures."

For the past few years, after 23 years in private practice in surgery, Albright has focused on a variety of issues related to medicine. The combination of being a surgeon, her broad interest in the health science, and her Olympic gold medal in figure skating have made her a natural choice for national and local committee and board work.

To name just a few of her commitments, she is on the board of the National Library of Medicine, Whitehead Institute for Biomedical Research (serving as chair of the committee on conflict of interest), and was recently appointed to the board of visitors of the Harvard Medical School-Beth Israel Deaconess-Mt. Auburn Institute for Education and Research.

She is director on the board of the West Company, which researches new types of drug delivery systems, is chairman of Western Resources, a holding company with plans for a research and development park and a senior care facility, and was on the advisory committee of the NIH Women's Health Initiative. She is a member of the corporation of the Woods Hole Oceanographic Institute, the New England Baptist Hospital (where she had been on the medical staff), and the Massachusetts Society for Medical Research. When Elizabeth Dole was in Boston in May to give the keynote address on World Red Cross Day, Tenley Albright was a featured speaker on banning landmines.

Albright tapered down her surgical practice as she became more involved in board activities and clinical research. "I had become intrigued with how we can affect many people through prevention rather than one at a time as a patient." Though she misses the operating room (and has to keep her hands behind her back so she won't join in when visiting another surgeon), she wondered as she operated how a particular patient's problem could have been discovered sooner or even prevented.

Albright started skating as a child in hometown rinks and ponds. After a bout with pre-paralytic polio at age 11, she worked on strengthening muscles, concentrating determinedly on skating. By age 19, she had won every major figure skating title possible. She was US champion five times, the first American woman to win a world figure-skating championship in 1953, and gold medal winner in women's figure skating at the 1956 winter Olympics in Cortina, Italy.

But it was medicine she really wanted to pursue. Rather than return to finish a fourth year at Radcliffe, she

applied to HMS. "After seven interviews I guess I finally convinced them I was serious." (She had a chance to reciprocate when she served on the HMS Admissions Committee from 1984-91 and then on the board of visitors of HMS.)

She attributes to her bout with polio not only her choice of medicine as a career but also the kind of care she subsequently gave her patients. She vividly recalls being in the hospital, seven "men in white coats" (house officers) standing at the foot of her bed. When she was shown a huge needle for a diagnostic lumbar puncture, she asked if someone would hold her hand. "No one said a word or even moved. Finally one stepped forward and held my hand. I've often thought about that person and would like to thank him. As with HIV at first, no one knew how polio was spread."

Because of that experience, she has never done a procedure without having someone hold the patient's hand. "Sometimes on Sunday morning rounds it was even one of my three daughters who held the patient's hand."

Medicine was always a family affair. At first she leaned toward pediatrics or psychiatry, but at the end of second year found that she was drawn to surgery. She and her brother Nile were in surgical group practice with their father, Hollis L. Albright '31, until he died in 1994.

Although her practice consisted primarily of cancer surgery, Albright, because of her involvement in athletics, began to get referrals in the 1970s of young female athletes with primary and secondary amenorrhea. That led to an almost decade-long collaboration with Rose Frisch, PhD, establishing some of the long-term health benefits for women with even moderately athletic lifestyles: lower risk of breast and

reproductive cancers, lower prevalence of type II diabetes, and no greater risk of bone fractures in postmenopausal years. Their collaboration recently resumed on a project to reduce teenage pregnancy.

In the late eighties Albright founded a clinical research diagnostic laboratory on a potentially promising marker for early detection and staging of tumors. Next April she will present the keynote address at the American Association of Clinical Research Professionals in Anaheim.

Albright says it pleases her "to see more patients take responsibility for their own health." She takes her own advice to stay active, and still loves to skate occasionally. Just last winter she skated at the opening of Boston Common's Frog Pond with two of her daughters.

Now she has added a new mission: connecting with other alumni and working with class agents to tighten two-way links with the school. "The more HMS knows about what our alumni are doing, the better we can demonstrate the far-reaching effects and influence of HMS to foundations, corporations and groups interested in making a difference by investing in the future of science and medicine here."

Ellen Barlow

John Schott, M.D.

HMS '66

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President's Report

by Suzanne W. Fletcher

Several discussions begun at the fall meeting continued at the winter meeting of the Alumni Council on February 28, 1997. First, there was follow-up to the council's decision to create a new Alumni Association Mentoring Award to honor an outstanding HMS faculty member. Bill Silen, faculty dean for faculty development and diversity, asked HMS reunion alumni in HMS classes of '72, '77, '82, '87 and '92 to nominate candidates. Over 50 nominations were received, and the award will be made during Alumni Week.

To help the school find appropriate ambulatory patients for students in the second-year physical diagnosis course, a committee composed of local Boston-area alumni was organized. The committee, chaired by David Marcello '56, has begun meeting and will have a preliminary report and recommendations for the council in June.

The council heard about student match plans from Edward Hundert '84, associate dean for student affairs. The interest in primary care specialties continues to grow, with 51 percent of students applying for residencies in internal medicine, pediatrics, medicine-pediatrics or family practice (up from 35 percent in 1992). Elizabeth Armstrong, director of medical education, discussed plans for increasing faculty development programs as student education moves from hospital-based programs to include more community-based learning. Bill Silen and Daniel Goodenough, Takeda Professor of Cell Biology and master of the Oliver Wendell Holmes Society, discussed how HMS is preparing students for a multicultural patient population and how to improve diversity at the faculty level.

The council met with Dean Daniel Tosteson, and he shared the progress made for the transfer to Dr. Joseph

Martin on July 1, 1997. Among the many priorities for his last few months, Dean Tosteson is working hard on the problem of student debt. Already during the past year, he has been able to lower the annual debt required of students before scholarship funds are available from \$25,000 to \$20,000.

The 1997 HMS Alumni Week approaches quickly. It will be a historic year, as we will have two deans in attendance.

Suzanne W. Fletcher '66 is HMS professor of ambulatory care and prevention at Harvard Pilgrim Health Care.

Benchmarks

To Divide or Differentiate: That is the Question

Decisions, decisions. Not only stressed-out people face them all too often; a person's constituent parts—his or her cells—do, too. At some time, each immature cell arrives at a crossroads where it must choose between two options: to go on dividing or to stop and differentiate instead. It cannot do both. In essence, the cell must decide to grow up.

The molecular mechanisms prompting a cell to grow up have long been mysterious. Yet division and differentiation are central to understanding health and disease.

Consider fat, for example. Bruce Spiegelman, HMS professor of cell biology at the Dana-Farber Cancer Institute, is trying to understand how fat develops and how this process relates to disease. When prospective fat cells make the wrong decision, havoc ensues. Too much differentiation can lead to obesity, which plagues one in three Americans, predisposing them to insulin-resistance, diabetes and other health problems. Too little differentiation can lead to runaway division and cancer. "If you could get your hands on the molecules that control differentiation, you would have huge therapeutic potential," Spiegelman says.

In the past six years, Spiegelman has unraveled much of the molecular biology of fat-cell differentiation.

In the December 20, 1996 *Science*, his team revealed a link between the control of growth and differentiation. The researchers reported that a prominent growth-promoting enzyme, MAP kinase, doubles as a powerful differentiation blocker, keeping the brakes on fat production while the body needs to grow.

Spiegelman has begun to apply this basic knowledge to cancer treatment,

trying to nudge cancer cells out of division and into differentiation. In the January 7, 1997 *Proceedings of the National Academy of Sciences*, the researchers reported that a new drug recently approved for treating diabetes can override the out-of-kilter controls of a rare but deadly cancer of adipose tissue. The drug forced the cells to differentiate, in effect, turning them into harmless lumps of fat.

Gabrielle Strobel

The 'Baby Bells' of the Body

Much like a complex society, the human body relies on different communication systems, such as nerve transmission, hormones and gap junctions.

Gap junctions? While the functions of the former two systems are familiar even to the casual observer, gap junctions for decades have not revealed their *raison d'être*. Consequently, these ubiquitous channels linking neighboring cells have remained obscure.

Not any longer. In one of the first glimpses at what gap junctions actually do—and how they may cause disease—researchers led by David Paul, associate professor of neurobiology at HMS, demonstrated that they are crucial to female fertility, at least in mice. In the February 6, 1997 *Nature*, the scientists reported that mice engineered to lack the gene for one such channel never produce mature eggs because the nurturing cells in the ovarian follicles cannot communicate properly with the oocytes they shelter.

The protein subunits of gap junctions are called connexins. They assemble into tiny tubes in the cell membrane, connect to a similar tube in a neighbor's membrane, which creates a pore through which small molecules can pass from cell to cell.

Researchers suspect that gap junc-

tions are the Baby Bells of the body's communication systems, serving as local distributors of information coming in via long-distance carriers like hormones. In the ovaries, for example, hormones convey messages from the brain, but not all ovarian cells have the necessary receptors. Those that do may use gap junctions to forward the information to their neighbors.

The knockout mice bolstered that view. Females unable to form gap junctions turned out infertile. Their follicles harboring the eggs never reached proper size and the eggs never matured.

The finding may help explain certain cases of a human condition called spontaneous premature ovarian failure, but more research is needed to explore this link, says Paul.

Gabrielle Strobel

Starving Tumors Without Toxicity

A soldier's life is said to consist of long periods of boredom interrupted by bursts of terrifying activity. Dormancy is also the rule for those arch warriors of the cellular world—cancers. Tumors initially form when a single cell uncontrollably divides. Once they reach a critical size, most tumors stop expanding.

"They sit, and sit, and sit," says Judah Folkman '57, Julia Dyckman Andrus Professor of Pediatric Surgery at Children's Hospital. Many tumors stay in a dormant state in which the number of new cells formed is counterbalanced by the number dying. Occasionally, a small tumor breaks free of this state and starts another period of frenzied growth.

Thirty years ago, Folkman and his colleagues observed that this bout of explosive growth coincided with the appearance of a new blood supply in the region of the tumor. Most researchers have since come to accept

that tumor growth actually depends on new blood-vessel growth, or angiogenesis. Over the past five years, Folkman and his colleague Michael O'Reilly, clinical fellow in radiation oncology, have been searching for ways to cut off this deadly blood supply.

Now, the researchers, in collaboration with Bjorn Olsen, Hersey Professor of Cell Biology at HMS, and his colleagues, report they have discovered a new protein that powerfully inhibits the growth of new blood vessels. The protein, called endostatin, not only stops mouse tumors from growing but actually shrinks them to a fraction of their original size. The report appeared in the January 26, 1997 issue of *Cell*.

If endostatin works as well in humans as in mice—"And that's a big if," Folkman says—it could provide a powerful weapon against cancer.

"They're very safe," he says. "We don't see toxicity and we don't see drug resistance—and that's a blessing." Given these advantages—and also their tumor-shrinking powers—angiogenesis inhibitors could provide a powerful partner to traditional cancer treatments.

Misia Landau

The Matter of Fat

by William Ira Bennett



Illustration by Erin Terry

IMAGINE A DRAMA IN WHICH CERTAIN tissues of the body become the actors: dangerous blood, sensitive nerve, anxious intestinal epithelium, heroic muscle, vain skin,* self-indulgent fat. The four humors have slipped off into the wings of history and self-conscious literary reference, but these six characters find their authors every day. Of them all, the one whose career I have observed most closely is adipose tissue, the lowest in moral status.

Adipose tissue was not always so disparaged. As recently as the late nineteenth century, embonpoint was appreciated in a woman. And fat men, if not consistently admired, have enjoyed a certain cachet because they were seen to be either jolly and generous or at least satisfied enough in life not to be dangerous adversaries. (Rex Stout's obese detective, Nero Wolfe, was only a partial exception.)

The moral fortunes of fat declined rather sharply around the time of the First World War. The era of Arthur and Taft gave way to that of Wilson and Coolidge. I think it is currently very unlikely that Americans would elect a truly obese president—the more so if the candidate were a woman. For women, the real squeeze has been on since 1920, perhaps not coincidentally the year they achieved suffrage and the year before the first international birth control congress marked a new phase in women's sexual liberation.

My guess is that around that time women in America made a rather bad symbolic bargain. They would be allowed to indulge their political and sexual appetites (if only to a degree) provided they could demonstrate their ability to contain another appetite: for food. A thin body rapidly became the outward and visible sign of this inward achievement. (I don't mean to imply that this pact was ever explicitly made

or that I can prove the connections.) The shift from admiring full-figured women, such as "airy, fairy Lillian" Russell, who in her prime weighed more than 200 pounds, probably occurred for many reasons. The historical coincidences are striking, nevertheless.)

There are a lot of reasons to doubt whether dietary self-control is the key to weight control, but this belief has remarkable tenacity in the face of mounting evidence that it is basically wrong. In this regard, the reducing diet, as an article of therapeutic faith, has about as much scientific support as bloodletting to treat, say, pneumonia. But the therapeutic practice of bloodletting for exactly this purpose not only long survived William Harvey's 1628 report that the blood circulates, but persisted for another quarter century after Pierre Louis' incisive 1834 publication of studies showing that the practice was at best minimally effective and indeed might not work at all.

Like the practice of bloodletting, the reducing diet promises to survive in the face of a great deal of evidence that it is not only ineffective but is, if anything, grabbing the wrong end of the physiologic stick. Every few years new research is publicized demonstrating that Americans have gotten fatter, or that obesity has been yet more clearly incriminated as a health hazard. Reasonable authorities are duly called upon to give their interpretation of the data and their recommendation for ways to reverse the trend. And the experts, duly identifying the abundance and accessibility of food as a contributing factor, call upon their fellow Americans to resist temptation and bend back the curve of weight gain that has persisted for about a century.

The belief that intake control is the key to managing body fat, deeply rooted as it is, rests on two critical assumptions: (1) that the conscious mind can calculate calories well enough to balance intake with output and (2) that the body itself has little or nothing to say in the matter. The lat-

ter view dates perhaps to the end of the eighteenth century. The eminent anatomist John Hunter, Lord Byron's surgeon, is supposed to have said that "fat is not animal substance," because an animal is "the same with as without it." (Byron, ahead of his time in many ways, was a pioneer of the crash diet as well as being an endurance swimmer in an age when the skill was not common.)

It is quite clear, however, not only that the conscious brain is completely incompetent to count calories but that adipose tissue collaborates with circuitry in the unconscious brain to manage itself with some precision.

The myth of conscious control can be dispensed with very quickly. Let us consider the body's tolerance for caloric errors. A pound of fat represents approximately 3,500 kilocalories of stored energy. A systematic error of ten extra kilocalories a day, roughly the energy stored in a carrot stick, would lead to a pound's weight gain in a year. An apple's error a day, about a hundred kilocalories, would put on ten pounds. Yet, as reported by Marian Burros in a recent *New York Times* article, when several eminent nutritionists were shown trendy restaurant meals and asked to guess the number of calories in them, they were off by 20 to 165 percent in their estimates. (Her experiment was based on more systematic research by Lisa Young of New York University and reported at the October 1996 meeting of the American Dietetic Association). The *Times* report indicates that the errors made by these highly trained and oft-quoted experts typically added up to several hundred kilocalories and at the extreme exceeded 1200 kilocalories. If their weight depended on their ability to estimate their intake, these nutritionists could not prevent themselves from either disappearing or expanding beyond all recognition in a few short years.

Of course, their weight doesn't depend at all on their intake but on the *balance* of intake with energy output,

*Readers with access to the Internet may enjoy www.skinema.com, a delightful site devoted to the roles skin conditions play in the movies.

which is even more difficult to estimate. To do so would have required them to judge the energy cost not only of stepping out of the taxicab and walking into the restaurant but of the various components of their metabolic rate for that day and, finally, to subtract the footsteps from the fettucine. The task would not have ended there; for they would probably have had to maintain a mental running total for a week or more to smooth out the typical fluctuations of daily living.

It seems worthwhile to consider the alternative—implicitly rejected by John Hunter two centuries ago—that the wisdom of the body extends even to its reserves of energy. A circumstantial case has been building for over 50 years now that the brain is capable of measuring supplies of body fat and adjusting them to meet an internal standard. The case became all but airtight when Jeffrey M. Friedman of Rockefeller University and his colleagues reported late in 1994 that they had discovered a new hormone, leptin (from the Greek for “light”). Friedman discussed his work as the 1996 Shelton lecturer at Harvard Medical School.

Leptin, a 16-kilodalton protein related to the cytokines, is produced by adipose cells in proportion to the amount of fat they contain. Circulating leptin is detected by receptors in several regions of the brain, most importantly for our discussion in hypothalamic nuclei known to be involved in the regulation of body fat stores. One of the best studied of these is the ventromedial nucleus (VMH).

Almost exactly 50 years before the discovery of leptin, Chandler McCuskey Brooks at Hopkins showed that he could ablate the ventromedial nuclei of a rat and cause the animal to gain weight. Left to its own devices the rat would eat ravenously and at least double its weight. The standard interpretation of this finding (and the one I was taught in medical school) was that Brooks had removed the part of the brain that governed satiety. The animal no longer knew when to stop.

This explanation begged the question: How did the VMH know when to stop? It also disregarded an important observation from Brooks’s control experiments. If he limited the brain-damaged animal to its caloric intake prior to the operation or, alternatively, to the intake of a littermate control, it still gained massive amounts of weight, albeit more slowly. When Brooks did a simple calculation, he found that the damaged rats gained 16 times the amount of weight from the same amount of food as a normal rat. In other words, the VMH nuclei have been entrusted with the job of regulating the upper limit of fat storage. Without them, the animal will change either how much it eats or how efficiently it stores food energy, or both, to gain weight.

We can now surmise that what Brooks had done was to remove a critical group of leptin receptors. Without them the animal’s brain could not know that it had adequate amounts of adipose tissue, and it therefore struggled to add ever more, until eventually the organism was overwhelmed by its own weight and died. Until leptin came along to close the loop, it was possible to argue (and many have) that appetite and metabolism are regulated independently of any “knowledge” on the part of the brain as to how much energy is actually stored in the body. Thus, there was room to argue that conscious decisions about second portions might actually be the key to weight control.

There is now, however, very strong evidence that the conscious mind is woefully inadequate to the task, and that there is an unconscious mechanism (not in the Freudian but in the neurophysiologic sense) with access to all the necessary data. It is probably time to abandon the pretense that reducing diets and variations of them (such as behavior modification) have any role to play in the long-term maintenance of reduced body fat stores. My guess is, however, that neither the media nor the experts they

call upon will soon abandon their commitment to the reducing diet and that many physicians will continue to refer patients for education in calorie control, as though it worked. The fact that there is virtually no empirical support for dieting (meaning five-year follow-up studies that show significant weight reduction) has had little impact on the habit of recommending that people at least “cut back” on what they eat.

Which brings us back to bloodletting. This practice was millennia old by the time it faded from use in the middle of the last century, and it was so intertwined with the identity of medicine that a Germanic word for cure became the English word leech, meaning both a physician and a type of annelid worm used to suck blood from patients. Indeed, the practice of bloodletting was more durable than the rationales that were given for it: “The blood circulates? Well then, phlebotomy is good not because it draws blood away from an area of excess as we once thought, but because it depletes the whole system of a dangerous oversupply.”

The challenge of empirical data, when they were finally gathered, was easily surmounted in the decades leading up to the Civil War. Physicians of the era could wave away the claims of statistical or “numerical” studies, as they were then called, by arguing that the essence of medicine was in the practitioner’s art and his ability to assess the specificity of the patient’s situation, as John Harley Warner has recounted in his book *The Therapeutic Perspective*. (This claim was made even though the same few treatments were applied over and over.)

What really sustained bloodletting and other practices that focused on body fluids (mercurials to elicit salivation, purgatives to produce diarrhea, emetics to induce vomiting) was a persisting view of the body as an open system, subject to unpredictable accumulation or depletion of necessary ingredients, depending on the

weather, one's own behavior and that of others around one, diet, factors in the atmosphere, and so forth. The historian Charles Rosenberg, in writing of this period, comments that, "The body could be seen . . . —as in some ways it had been since classical antiquity—as a kind of stewpot, or chemico-vital reaction, proceeding calmly only if all its elements remained appropriately balanced." In other words, the proportions of important ingredients of the body was highly vulnerable to upset and sometimes need to be appropriately altered by the healer's art.

What has changed, but only incompletely, since that era, is our view of the body. Beginning in the 1850s Claude Bernard steadily developed his view of the organism as, in many ways, a self-regulating and self-contained system, maintained in a state of relative constancy by the blood. Although our attention is now drawn to the concept of constancy, or homeostasis as Cannon would develop it, there is another implication of Bernard's famous statement of 1858 that, "All of the vital mechanisms, however varied they may be, have always but one goal, to maintain the uniformity of the conditions of life in the internal environment." This was a profound change in the way the body would come to be understood and, perhaps, experienced, because it isolated the body from fluctuating conditions in the external environment and in significant ways undermined the rationale for traditional treatments intended to alter the balance of fluids.

The concept of an "internal environment" radically undermined the ancient view of the body and, along with several other forces, the medical practices of the preceding centuries, but it never precipitated as much heated argument as Darwin's contemporary phrase "natural selection." If Bernard's work was revolutionary (and I believe that it was), the revolution has remained incomplete. The ancient view of the body as an open system

persists in our culture in a variety of ways. It is the basis of much that is practiced as alternative medicine. And in complicated ways it persists in our beliefs about body fat: in the notion that obesity is a reflection of character and that it can be fixed by vigorous effort.

There is no reason to believe this is true. Although we observe that different people in a population may carry strikingly different amounts of fat, and there can be significant changes during one person's life, both the variance and the variation over time overwhelmingly appear to be due to genetic and developmental influences. Profound environmental change, such as famine, can indeed change a person's body fat content, but it does not appear that the majority of people can bring about these changes for themselves without paying a very high psychological price.

The historical increase in weight of the population seems hardly likely to have resulted from the increasing abundance of food. As a population, we now eat less, not more, than our great-grandparents did because in our daily lives we exercise a great deal less. Remember that someone who gains 30 pounds of fat over a ten-year period has, on average, consumed 30 excess kilocalories a day in excess of expenditure. This amounts to a net caloric excess of only 1.4 percent, assuming a diet of 2,000 kilocalories a day—hardly a Lucullan indulgence.

It is, nevertheless, apparent that fat stores change: with age, with urbanization, with cigarette use. The inner system regulating energy balance is clearly not hermetically sealed off from outside influences. Historically, the most profound of these is probably the steady reduction in exercise level demanded by everyday life—not merely because exercise spends calories but because it exerts a tonic effect on the system that leads to reduced storage of calories even as more are consumed. Odds and ends of other secular shifts are likely to be playing a role: the drift to diets higher in fat, the

reduced burden of infection and changes in reproductive patterns. The take-home point is that this system of intake, storage and output is not primarily or effectively regulated only at the intake end.

The discovery of leptin opens the way to more rational treatment of weight problems in a variety of ways. By integrating adipose tissue into the internal milieu, it may finally help to unseat the trivial concept that obesity is mainly a result of careless or neurotic behavior.

Discovery of the hormone also opens the way to rational drug development. The medications currently available appear to act on neurotransmitters that modulate the leptin system, but they have limited efficacy and in any case would have to be used for a lifetime if they were to be used rationally. Prolonged, and perhaps even short-term, use of these drugs entails a small but appreciable risk of primary pulmonary hypertension; it remains to be seen what will happen with life-long use.

Meanwhile, it is humbling to realize that a powerful molecule playing such a well-defined and important physiological role has only so recently been characterized. It is also delightful to learn that a major actor in the drama of the body has only now appeared on the stage and to wonder how many more will appear before the curtain goes down. ❧

William Ira Bennett '68 is a psychiatrist on staff at Cambridge Hospital and editor-in-chief of the Harvard Medical Alumni Bulletin. He is coauthor with Joel Gurin of The Dieter's Dilemma: Eating Less and Weighing More (Basic Books, 1982).



photo by Stuart Darsch

Weighty Issues

by Janet Walzer

WHAT IF A COLLEAGUE POINTED TO your cheeks and said, "You're looking very healthy today," rather than the customary "Good morning." Anne Becker '87, HMS assistant professor of medical anthropology, found this was a fairly common greeting during her 15-month stay in Fiji. Implicit in this greeting was the belief that being healthy meant an above-average body size.

Doing field work in the South Pacific as a Fulbright scholar, Becker was struck by the relative absence of eating disorders in this culture and the differences in how Fijians and Americans relate to food and body size. This experience, along with her psychiatry residency, where she worked with HMS Professor of Psychiatry David Herzog, led Becker to specialize in the field of eating disorders.

Becker brings this cross-cultural perspective to her work as director of research and training at the Harvard Eating Disorders Center. "Eating disorders are in part culturally constructed and socially produced," says Becker. "Bodies mean different things in different social contexts." What Becker observed about Fijian culture underscores the American approach to food, dieting and body size. "Fijians are not interested in reshaping their bodies like Americans. Americans invest themselves in the belief that they can make themselves better. Fijians are not thinking about their

own bodies, but rather about caring for and feeding those around them."

In fact, what a majority of Americans value—a thin body—has a very different meaning to Fijians, according to Becker. "In Fiji, thin represents scarcity of food and social marginalization, while a relatively large size body represents a well-fed person and social connectedness." Meals in Fiji promote togetherness and social cohesion, and the door is always open for anyone when it comes to eating.

Not surprisingly, what is considered an ideal body size in Fiji would be considered overweight by American standards. Becker was offered food constantly during her stay, resulting in a one pound weight gain for every month she was there. "The Fijians believed my body was an index for how people cared for me." Reactions by both the town elder in Fiji and her mother—the former upset that Becker was going home "so thin," the latter surprised by her daughter's appearance at the airport—certainly demonstrate these cultural differences.

Becker learned that when people lose weight in Fiji, known as "going thin," it is considered to be related to a social loss or social neglect. In American culture, however, weight loss is something that is applauded and encouraged, regardless that if taken to an extreme, such as in the form of an eating disorder, the consequences can be medically dangerous, and in some cases, deadly.

“Most people now know someone who has struggled with an eating disorder.”

Although there are several types of eating disorders, the most well known are anorexia nervosa, bulimia nervosa and binge eating disorder. Anorexia is characterized by weight loss, fear of gaining weight or being fat, amenorrhea, and a distorted sense of body shape. A person with bulimia binges and then through vomiting, using laxatives or diuretics and/or exercising to excess attempts to purge those calories. There is a preoccupation with weight and body image in both of these conditions, and the symptoms and behaviors serve to help them cope with everyday life. Binge eaters, on the

other hand, are often overweight and do not feel they can control their eating, which is characterized by binges but no purging afterwards.

Mental health providers also see many people who exhibit “disordered eating.” This term is complicated, notes Herzog, who heads the Harvard Eating Disorders Center. It generally refers to attitudes and behaviors toward food that are sufficient enough to interfere with a person’s life, both medically and psychologically, but do not meet strict criteria for either anorexia nervosa or bulimia nervosa. An example of this, explains Herzog, is someone who binges and vomits once a week or who has lost a significant amount of weight but continues to menstruate.

In the last two decades there has been a shift in who is vulnerable to an eating disorder. “About 15 to 20 years ago eating disorders were considered a problem only among teenagers; now they’re seen across the board, from age 7 to 70,” says Herzog. Although 90 to 95 percent of patients with eating dis-

orders are female, 30 percent of binge eaters are male.

Despite the secrecy associated with eating disorder behaviors, our personal awareness has changed as well, says Herzog. “Most people now know someone who has struggled with an eating disorder. That wasn’t the case 25 years ago.” Indeed, it was not until the late 1970s that bulimia was medically identified as an eating disorder.

Yet the practice of controlling one’s intake of food, or fasting, has been used for political, religious and cultural reasons for centuries, observes Catherine Steiner-Adair, director of education, prevention and outreach at the center. Steiner-Adair, who has developed an outreach program targeted to girls and teenagers, notes that one reason treating patients with eating disorders is so complex is because eating is a necessity. “Eating disorders are different from other risk-taking behaviors because food is a substance we can’t live without.”

For the past 18 years Steiner-Adair has been associated with the Harvard

The Harvard Eating Disorders Center

Since the late 1970s several Harvard-affiliated institutions had eating disorders programs in place. What was missing though was a broad continuum of clinical care, research and training. Support toward pooling these separate programs came in 1992 when Joseph Coyle became chair of the HMS Department of Psychiatry. What resulted was a consortium called BRED—Boston Researchers on Eating Disorders—co-founded by David Herzog from Massachusetts General Hospital and David Jimerson of Beth Israel Hospital, and consisting of 55 members from both Harvard affiliates and those beyond the Harvard community.

Although this group’s efforts were interrupted by the mergers among the Harvard hospitals, support to come together as one entity did not waiver, and in 1993 the Harvard Eating Disorders Center was created with both public and private funds. Individuals from business, academia and science comprise the board, which now extends beyond Boston to include interested people from New York and Florida.

The center’s mission is three-fold: to promote research in eating disorders; to develop training programs for mental health professionals and primary care doctors; and to focus on prevention and education. In the realm of research, the center recently funded a

pilot project on anorexia nervosa and osteoporosis, led by Anne Klibanski and Steven Grinspoon of the neuroendocrine unit at MGH. These researchers have since received approval for a five-year grant to examine the association between anorexia nervosa and osteoporosis.

The center is also in the process of setting up a national scientific advisory committee to review grant proposals in the clinical and basic sciences. Herzog hopes that in the next year or two the center can offer a postgraduate training fellowship, which would be the first of its kind in the country.

Project on Women's Psychology and Girls' Development, led by Carol Gilligan at the Harvard School of Education. Early on in her work with girls who had eating disorders, Steiner-Adair saw a common thread in her counseling sessions. Regardless of what type of difficult situations girls were experiencing, many manifested their pain through eating disorder symptoms and behaviors. Looking at the sociocultural context of girls growing up after 1960, Steiner-Adair wondered, "What directs girls to eating disorders and disordered eating?"

Now, along with Lisa Sjostrom, EdM, Steiner-Adair will draw on research on girls' development and address its sociocultural context through a three-year pilot program called "Full of Ourselves: Advancing Girls' Right To Throw Their Weight Around." In collaboration with the Patriot Trail Girl Scouts, Steiner-Adair and colleagues are designing a program for 8- to 14-year-old girls to promote the healthy development of girls and the prevention of eating dis-

"A staggering 9 percent of nine-year-old girls have tried purging."

orders. A group of 13- and 14-year-old girls will be taught skills to help them challenge cultural and media messages that glorify being thin and to navigate the stresses of daily life so they do not resort to disordered eating. In turn, this group will teach the younger girls how to resist messages that tell them a "certain look will make them better people," explains Steiner-Adair.

Steiner-Adair hopes to collect a sample that represents all who are at risk for an eating disorder. Exactly who is at risk in terms of age and ethnicity might come as a surprise. The age of onset has dropped and some

research suggests a staggering 9 percent of nine-year-old girls have tried purging. And the belief that an eating disorder is only an illness of affluent white populations is not accurate, says Steiner-Adair. In fact, this program will target those groups who are often underserved because they are under-recognized, such as Native American, African American, Hispanic and Latino girls. The size of the sample is dependent on funding, which the center still seeks. Initial funding has been received from the Paul and Phyllis Fireman Foundation.

"Full of Ourselves" will also include curricula for parents, teachers, school counselors, and youth group leaders since eating disorders do not happen in isolation. Indeed, how parents view food and body image is crucial for their children's relationship to their own bodies. Becker saw that parents in Fiji were vigilant about watching their children's appetites. In the United States family and societal pressure often create an environment where girls believe they should lose weight.

The center's second goal—educating and training teachers and clinicians—will be highlighted on October 18, 1997 with its first National Conference for School Based Eating Disorders Prevention in Boston. Catherine Steiner-Adair, the center's director of education, prevention and outreach, also believes more education and training of health educators, teachers, coaches, parents and school nurses in eating disorders is critical. Doctors are also included in this group. "Students can go through HMS and not learn enough about how to evaluate girls and boys for eating disorders. We hope to offer more training for internists, ob/gyns, pediatricians and dentists. Diagnosis is a critical moment

in the life of a child and their family."

Tackling all three of its goals, Anne Becker '87, the center's director of research and training, served as the associate scientific director of the first National Eating Disorders Screening Program in the country. Collaborating with the National Mental Illness Screening Project, the center created a self-report screening instrument and protocol for college counselors used at over 600 college campuses last year during National Eating Disorders Week. In just its pilot year the results were striking: approximately 9,000 people returned their questionnaires and more than 5,000 of this group sat down with a coun-

selor to talk about their symptoms. Of this latter group, 75 percent had symptoms that were clinically significant enough to warrant further evaluation.

Programs such as this provide more insights for future research, and the efforts of the center in general serve, as Becker says, "to demystify the treatment for eating disorders and make people aware of the symptoms as medically dangerous."

JW

Conversely, Fijian parents are concerned about their children losing their appetites, known as an “appetite disorder.” When this occurs, says Becker, parents immediately administer traditional medicines to correct it.

Many would agree that American society places too much emphasis on what girls look like as opposed to who they are. “There’s a hurting teenage population out there and a lot of confusion about achievement and appearance and how to negotiate it all,” observes Herzog.

In this vein, Steiner-Adair believes that parents should check in with themselves about these issues. “Parents should not make comments about how much their children eat or what they look like.” In addition, they should be aware of what they may be passing on to their children. “When talking to parents, I’m often asked ‘Is it okay that I don’t let my children eat anything with fat?’ and I reply, ‘No, they’re children, it’s not okay.’” Steiner-Adair recommends that if parents have serious concerns about their children, they should seek advice from their pediatrician, a nutritionist or an eating disorders specialist.

In developing outreach and prevention programs, it can be helpful to have someone who “has been there” speak about their own experience. Since her college days, third-year HMS student Andrea Marmor has served on panels and organized events that address eating disorders. Marmor became anorexic during her freshman year in college. But like many individuals with eating disorders, it was not something that happened overnight. “There were a bunch of factors brewing before I became anorexic. I had bad ideas about my body for a while,” says Marmor. “And I think it was a combination of increased stress from being away from home, meeting a new peer group and having to define myself in a new way.”

At her lowest point, Marmor, who is 5’6”, only weighed 90 pounds. Yet for quite a while Marmor did not see



how her illness was affecting the people around her or her own ability to function. “It was only in the late stages of my illness that I realized I was sick, unhappy, too thin, but I couldn’t eat,” recalls Marmor.

Watching her caloric intake and the number of miles she ran every day gave structure to Marmor’s life. “Having my life under control was a big issue. It wasn’t about weight or my body,” says Marmor. “The number of pounds and miles were a measurement of how well I was doing in terms of control, but there was no end point.”

Although Marmor once thought “giving it up was impossible,” she suc-

ceeded in doing just that six years ago through hospitalization and individual therapy. During her last eight-mile run before being admitted to the hospital, she remembers thinking, “Thank God this is the last time I have to do this.” Marmor says being in the hospital was a small part of her recovery compared to the process afterwards.

The ways in which people recover from eating disorders are as varied as those who have this illness. Bulimia and anorexia are treated differently. “Bulimics can do well in both individual and group therapy and, although they often suffer from shame and embarrassment, are able to present

*"Parents should not
make comments
about how much
their children eat or
what they look like."*

— Catherine Steiner-Adair

their problems," explains Herzog. Becker notes that there can be considerable lag time before those with eating disorders enter treatment. "Many are afraid to tell because they fear the symptoms will somehow have to stop."

Two very different therapeutic approaches, cognitive behavioral therapy and interpersonal therapy, can be useful in treating patients with bulimia. Also, a relatively new adjunct to treatment is the use of serotonin reuptake inhibitors (SSRIs), a class of drugs commonly used for treating depression. These drugs have been effective, independent of whether the person is also depressed.

In contrast, most patients with anorexia, according to Herzog, are "brought" to treatment and that sets up a different dynamic between clinician and patient. In general the treatment options for anorexia are not as straightforward as with bulimia. "Many anorexic patients need inpatient structured programs and then ongoing treatment to help them tolerate a changing body," comments Herzog, who is currently in the tenth year of an NIMH funded study of 250 women with anorexia and bulimia. "We study how people get well. What works a lot of the time is the relationship the patient has with a doctor, therapist, friend, or even themselves through diaries."

Herzog emphasizes that collaboration among professionals is critical.

"The primary care doctor is often not comfortable with someone who isn't ready to get better, while mental health professionals might feel the patient is too sick to be cared for only by themselves." In light of the potential medical complications that can arise—infertility, osteoporosis, electrolyte disturbances, cardiac problems and sometimes death—a team approach appears to be a necessity.

For people who have struggled with an eating disorder, their lives are inevitably changed by the experience. Marmor says that her battle with anorexia has affected her both professionally and personally. As a doctor she hopes to convey to her patients that they should honor their bodies. And as for herself, "My mind and life have so much more room now for things that are more important." ❧

Janet Walzer is associate editor of the Harvard Medical Alumni Bulletin.



photos by John B. Levine





Chrome Home

by John B. Levine

IT IS THE AMERICAN ANALOGUE OF the British pub, the Greek taverna, the French cafe. The diner is an institution whose psychological function follows from its form. It is a miniature restaurant, compact in arrangement, where customers rub shoulders with waitresses and with each other. The food is familiar, prepared and served while you watch, and often excellent in quality. Prices are reasonable. The diner is non-elite, tolerant of "respectful strangers" but, like a small town, it can be a closed society.

America has come back to the diner. Value-conscious consumers are continuing to eat out while paying less in establishments with good food but simpler surroundings. They are also forsaking the monotony of franchise restaurants for the variety and individuality of home-style cooking. Amidst the withering away of family life, there is a search for community. We no

longer have the time to cook home-style meals. Meat loaf has become chic. From restoration to reinvention, the diner is moving forward, keeping pace with social trends.

A small restaurant of a certain age, a familiar menu, regular patrons, a cramped but cozy space, lively interactions between customers, waitresses and cooks—like any simple but perfect design, it is difficult to explain. What makes diners unique, and why do we love them so? What are the characteristics of dinerliness? I am going to approach this question by examining the psychology of various kinds of small eating places, certain secular trends, the architecture and geometry of diners, the role of memory, and how these factors may fit together. I will not proceed in linear order, but rather like a diner patron, I may start out with apple pie and coffee before proceeding to pot roast.



In a history of the American restaurant, *From Boarding House to Bistro*, Richard Pillsbury describes a series of eating encounters—an inn in rural Pennsylvania that was like “a drive back in time;” a poorly maintained Massachusetts diner where the regular patrons were clearly more attracted by the group process than by the food; a trip one rainy Sunday morning to a decaying White Tower in Pittsburgh that left him feeling he had “stepped into a time warp” but had nonetheless discovered “the real thing;” a small, unprepossessing cafe in Baltimore that turned out to be a neighborhood place, complete with Eastern European clientele and an Eastern European seasoning on the hash browns; an eatery in southern Massachusetts where the waitresses, mother and daughter, flirted and managed their customers with deftness and assurance. Implicit in Pillsbury’s accounts are the psychological themes of going back in time, group process as social nourishment, authenticity, ethnicity, simple fare and community.

There is something comforting and

familiar about eating in old restaurants. Liz Logan in a *New York Times* article (June 21, 1992) characterizes this feeling as an “antidote to urban nervous breakdown.” In describing Mocca, a Hungarian restaurant on Second Avenue near East 82d Street, she enumerates such essential features as comfort food, waiters and waitresses who have served the same customers for a long time and across generations. Repeated ordering of the same standard dish also contributes to “a modest payoff of completely reliable satisfaction.” The result is “a sense of soul, resonance and continuity.” The outer landscape calms the inner landscape.

We look for much of the same in an ideal diner: comforts of home without the disadvantages; echoes of the pleasures of the extended family. The ritual of eating and talking is reduced to its essentials. One sits down to a plate of hashed browns, two eggs over easy, fried ham, and toast for the pleasure of the familiar. Diners may have first-rate food, made with fresh local ingredients and the owner’s personal flair, but culinary adventure is not the

point. One is seeking comfort.

The relationship between simple food and home is primordial. Garrison Keillor captures this sentiment in his piece “All You Do Is Just Sit Down.” He describes a family Thanksgiving “as lovely and ordinary as any in America,” “lavish aromas,” “a dinner as sweet and plain as life itself,” “the dinner of all dinners, so generous, so predictable.” “Thanksgiving is a peasant holiday and good taste has never been a part of it. That’s why it is such a comfort. All you have to do is sit down to it.”

The benefits of eating in a diner are social as well as gastronomic. William F. Whyte, 50 years ago, described the cafeteria as club. In *Street Corner Society*, he wrote, “Nearly every night at about the same time the gang gathers for ‘coffee-and’ in its favorite cafeteria or for beer in the corner tavern.... Positions at the tables are fixed by custom.... Out of such interaction there arises a system of mutual obligation which is fundamental to group cohesion.”

Expanding on this theme in his

1948 classic, *Human Relations in the Restaurant Industry*, Whyte adds, "They know the place, just as if it were home. They like the bright lights, the shining tiled floor, and the clean green paint of the walls. Their orders are small—usually just 'coffee-and's', coffee and donuts or muffins—but they like to look through the glass counter to see the neat and attractive displays of mixed fruits, salads, pies, cakes, and other delicacies. And they have an affection for the table that is their regular headquarters for the evening."

Dorothy Sue Cobble, a labor historian at Rutgers, suggests that the relationship with the waitress is the central form of emotional contact in restaurants. In *Dishing It Out*, a history of waitresses's unions, she relates, "In the theater of eating out, the waitress plays multiple parts, each reflecting a female role. To fulfill the emotional and fantasy needs of the male customer, she quickly learns the all-too-common scripts: scolding wife, doting mother, sexy mistress, or sweet, admiring daughter The specific content of that interaction arises from the symbolic, unconscious emotional lives of the participants themselves. More than food is being consumed at the restaurant site. And those who serve it are responding to hungers of many kinds. Eating stirs sexual and emotional associations of the most primitive order."

Another part of the pleasure of the diner is aesthetic, the pure design of the apparatus. A diner is the perfect expression of the economy of means. The spring-loaded rack that lifts coffee cups to counter height, the spheroid tank that releases a premeasured dose of milk into mug, the polished nickel coffee urn with tubular glass gauge that was built with the indestructibility of a 1930s naval engineering plant, all underline that this is an efficient, no nonsense, well-laid-out environment. The art moderne diner represents the integration of chrome and home—mom as machine.

Modern fast food restaurants, like telephone booths without walls, have

been designed to provide as little comfort and privacy as are permissible, so that patrons will not hang around after completing their business. The furnishings are engineered for profit, not comfort. Diners, in contrast, are designed to be comfortable.

The well-run diner continues to value and embody practicality, unpretentiousness, competence and craft. It has a certain Zen-like simplicity. Like the Volkswagen Beetle, which is enjoying yet another comeback, it possesses a sophistication of design and execution that is both elegant and workable. In an age where cars are too expensive and too complicated to fix oneself, where it is difficult to tell the difference between ordering a meal in an upscale restaurant and participating in an encounter group, the directness of the diner's design and mission is refreshing. When we enter a diner, the world once more becomes focused, organized, manageable.

The authenticity of diners is a special component of their appeal. We cannot all go for a drive in a '38 Packard or even a '55 Chevy, but we can eat in classic diners of these vintages. There is something satisfying about taking nourishment in solid surroundings with mahogany paneling, marble counters, streamlined stainless steel, or glass brick. Eating a western sandwich or a bowl of chili served on Buffalo china plates may not have the cachet of playing early music on period instruments, but there is the same sense of continuity.

Richard Snow argues that memory is an essential ingredient of the diner experience. In his introduction to Gerd Kittel's book of diner photographs, *Diners: People and Places*, he writes, "The sense of comfort and cheer that any good diner radiates is an amalgam of the actualities of the diner itself—the blunt facets of the salt and pepper shakers, the menus above the grill with their square white capital letters, the steam rising from the coffee urn, the clunk of cheap, solid china being slapped down on Formica—and

of memory. The melancholy, luminous and utterly precise photographs by Gerd Kittel that make up this book are, of course, about actualities. You'll supply the memories."

Kittel himself sounds this elegiac note in summarizing his work: "It's a small collection of personal impressions, relaxed portraits of people and places I enjoyed, reflective and bitter-sweet at times, because it is also a good-bye."

To eat in a diner, says Snow, is to return in some way to "the diner of my memory, the place where I first, at my father's urging, had that supreme (to a ten-year-old) delicacy, the breaded veal cutlet; where I marked, grainy eyed and exhilarated at the end of a night-long party, my first morning as a high-school graduate; where I picked dispiritedly at my homefries after driving a friend to the gates of the army, gloomily amazed that my classmates and I had wandered so far into the foothills of adulthood."

Marcel Proust, in *Remembrance of Things Past*, describes the same rush, the flood of childhood memory and association, in the famous passage about dipping a petite madeleine into a cup of lime-flower tea. The diner today provides the setting for the same trick, except with donuts and coffee.

Stephen Jay Gould in his essay "Counter and Cable Cars" argues that what we value in diners is their permanence, sense of community and authenticity. "Uniqueness," he observes, "has a habit of crawling back in and around the uniformities of central planning."

McDonald's has not put the diner to rout. If the highway is the symbol of life's journey, then the diner is the symbol of comfort along the way. ❧

John Braverman Levine '79 is HMS clinical instructor in psychiatry. This article is adapted from a talk presented to the Society for Commercial Archeology in Frazer, Pennsylvania on June 18, 1993.

Eat and Learn

by John D. Stoeckle

IN LEARNING TO CARE WE TAKE HISTORIES on the eats of our patients, those fat, thin and hypercholesteremic, but rarely reflect on our own changing gastronomical styles. In today's professional lives, eats are now connected with learning. Take, for example, lectures and lunch, rounds and snacks, meetings and catered meals, evening discussions and dining out. But learning and eating were not always joined together.

Looking back, the two preclinical years on the medical campus meant meals after class at Vanderbilt, sometimes locally at Howard Johnson's or the Linwood Grill. Going through clerkships was another eating life, a chance to sample the various hospital cafeterias with a free meal ticket.

At the MGH, the lunch was down through one of two short cafeteria lines into the doctor's dining room where the "privates" made up one big

table. Students ate with residents and "the visit" after morning rounds, getting to know some bits and pieces of the visit's other life away from the ward. The conversation themes between bites usually left out "our patients" for topics on careers (a mentoring of sorts) and just gossip.

Residents in white coats with name tags also got free eats, even late at night in the nurses' dining room, a pay in food when the monthly check was \$50.00. Those once subsidized hospital cafeterias were not reviewed in any "Cheap Eats" column, but they got various student ratings. The BI and MGH were good, BLI too, but less so the Brigham, BCH and the "Boston Psycho" (Boston Psychopathic Hospital, now called Massachusetts Mental Health Center), at 74 Fenwood Road.

Besides these free daily meals for clinical work, one evening each year



was celebrated with everyone dining at the chief's home. It was a small world.

Today, professional eats are everywhere. Residency applicants are recruited not only with a departmental lunch, but an upscale-restaurant evening out. On morning rounds, the resident's chart rack on the ICU and down the once sacrosanct ward floor may carry a cup or two of unfinished coffee. Later, nurses and ward secretaries may lunch in staff rooms, sometimes at their desks. Then noontime rounds five days per week for residents and students serve not only topics of all kinds (DVTs, hypertension, osteoporosis) but choice eats, from sandwiches, pasta and pizza to Indian dishes, along with the talk. In rows of conference room chairs, the training staff munches while listening and learning.

At the MGH, the old serving lines and staff dining rooms are gone, now

democratized into one big common cafeteria. Food stands offer self-service salads and assorted dishes, drinks and desserts that match the commercial quick eats clustered in airports (only sushi and beer missing). It is a place for everyone: patients, families, professionals, support-administrative staff. The "privates" can still sit at a designated table, but the old departmental staff tables are gone, as are the "table-for-four" with residents, students and visit.

Quick eats before or taking your own tray to the many meetings in our institutional lives are gone too. Free catered lunches are now served at meetings in conference rooms at hospitals and at HMS. At night, the best is gourmet eats, the chance to dine at such upscale places as Olives, Aujourd'hui, the Meridien, to learn about the treatment of everyday disorders from asthma, hyperlipidemias and acid reflux to depression. This year I've received some 50 invitations, a

chance to dine out nearly once a week—all free from the "drug reps" of pharmaceutical firms.

With so much eating and learning joined together, are we better off: living longer, more collegial, smarter or just better fed? Hard to know, but we may have forgotten Osler's caution: "Do not waste the hours of daylight in listening to that which you may read at night." After supper, of course. ❧

John D. Stoeckle '47 is HMS professor of medicine emeritus and physician at Mass. General Hospital. He is on the editorial board of the Harvard Medical Alumni Bulletin.



photo by Ilene Perlman



First operation under
ether anesthetic, 1846

A timeline of deans of Harvard's Faculty of Medicine

NOWHERE IN BEECHER AND ALTSCHULE'S BOOK, *Medicine at Harvard, The First 300 Years*, nor in Thomas Harrington's three-volume text that preceded it, *Harvard Medical School*, can a definition be found for the post of "dean." There is no doubt that in looking back through history, the meaning and particularly the function of the deanship has changed as dramatically as the school itself. This post did not even become a full-time position until 1923, in the midst of David Edsall's deanship. Before this time "deans" were "the big men on campus," the most influential faculty.

For this reason we can include teacher and HMS founder John Warren (the first) on the dean's timeline, although his son, John Collins Warren, was probably the first to hold that title. Others who held formative professorships might also be considered deans, such as James Jackson, Professor of Theory and Practice of Physic from 1812 to 1836, or John Gorham, Professor of Chemistry and Materia Medica in 1809, but they have not been included in this list.

It is clear that many of the earliest deans of the nineteenth century had far too many avocations—in addition to their professorships—to devote themselves to full-time administration of the Harvard Medical School. And although contemporary deans may have vocations of their own, the deanship is now most decidedly a full-time affair.

by Sarah Jane Nelson

The Men Who



1782

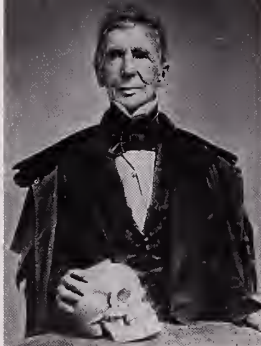
John Warren
The first professor chosen at the founding of HMS in 1782.

Professor of Anatomy and Surgery.

Was primarily responsible for making the swampy commute from Cambridge a thing of the past for both students and instructors by moving medical school to Boston in 1810.

His interest in anatomy was spurred by the War of Independence which provided him with many opportunities for human dissection.

Delicate health. Migraine sufferer.



1816

John Collins Warren, dean from 1816-1819, 1821-1826

First actual dean.

Carried on the torch of his father, John Warren.

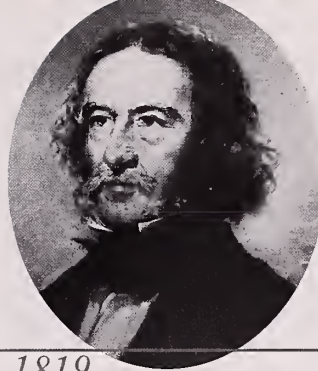
1815: Professor of Anatomy and Surgery.

1846: Started collecting anatomical specimens in 1800 and founded the Warren Anatomical Museum

1846: Performed first operation under ether anesthesia. Performed first operation on a strangulated hernia.

1847: Willed his body to HMS. His skeleton was bequeathed to the museum, with the stipulation that it only be viewed by members of the Warren family.

One of eight founding editors of The New England Journal of Medicine and Surgery and the Collateral Branches of Science (1812). Also included Walter Channing, Jacob Bigelow, James Jackson.



1819

Walter Channing, dean from 1819-1820, 1826-1847

Longest deanship (with interruption)

Was expelled from Harvard College for taking part in the student food rebellion of 1807, but was later awarded the BA degree as a member of the class of 1808.

Received MD degree from University of Pennsylvania Medical School 1809.

Received second MD from Harvard in 1812.

Professor of Obstetrics and Medical Jurisprudence

1847: At meeting of the Medical Faculty, Channing asked if a woman might attend medical lectures and go to examination for a degree.

Scientific contribution: wrote "Treatise on Etherization in Childbirth" (1848) which reported on over 500 cases.



1820

Jacob Bigelow, dean from 1820-1821

Professor of Materia Medica and Botany and Rumford Professor of the Application of the Sciences to the Useful Arts.

Credited with popularizing the word "technology."

Author of American Medical Botany and Florula Bostoniensis.

Misidentified large marine mammal off Cape Ann, MA which turned out to be a deformed black snake.

1831: Designed and founded Mt. Auburn Cemetery, the first ornamental extra-urban cemetery in the country. Has his own sphinx there.

Translated Mother Goose rhymes into Latin or Greek.

Scientific contribution: Spoke out against heroic measures in "self-limited disease."



Anatomy certificate, March, 1782

Jacob Bigelow's sphinx in the Mount Auburn Cemetery, Cambridge, MA

Would Be Dean





1847

Oliver Wendell Holmes, dean from 1847-1853

"Literary dean"

1847-1882: Taught anatomy and physiology.

Against homeopathy.

Famous scientific contribution: "The Contagiousness of Puerperal Fever."

Anatomist who wanted to teach women anatomy, but in classes separate from men.

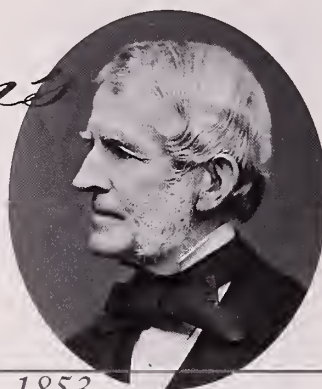
1875-1888: Was first president of Boston Medical Library.

Co-founded the Tremont Medical School, which later merged with HMS.

First person to use the term "Boston Brahmin" to describe himself and many associates.

Holmes was assigned the one o'clock lecture time because no one else could hold the attention of students at this time of day.

Warren



1853

John Bernard Swett Jackson, dean from 1853-1855

Professor of Pathological Anatomy.

Curator of Warren Anatomical Museum for more than 20 years.

In a Globe appreciation following Jackson's death: "It was next to impossible to coax him to look through a microscope—he would turn away with 'I know nothing about it,' in a tone that implied he did not want to have anything to do with it."

Says George Monks, MD: "His duties in the school were at one time so numerous and varied as to lead him to say, 'Instead of filling a chair at the University, I really occupy a settee!'"

Author of famous poem "Old Ironsides," in addition to Atlantic Monthly's "Autocrat at the Breakfast Table" series, along with many other poems and some novels.



1855

David Humphreys Storer, dean from 1855-1864

Obstetrician and naturalist.

1838: Prior to his deanship, he was a founder of the Tremont Street Medical School, along with Bigelow, Reynolds and Holmes. This was a summer school that allowed clinical work to be integrated into a far less formal curriculum than that of the university at that time.

Wrote "A Synopsis of the Fishes of North America" (1846), Boston Society of Natural History.

D. Humphreys Storer



The Harvard Medical School 1883—1906, 688 Boylston Street, Boston, MA





1864

George Cheyne Shattuck, dean from 1864-1869

Hersey Professor of the Theory and Practice of Physic (until 1873)

Known to be progressive and active in bringing young men into ranks as instructors.

Scientific contribution: distinguished between typhus and typhoid fever.

Went on a birding expedition to Labrador with John James Audubon who named a bird after the "sickly medical student." The Shattuck bunting is now known as the clay-footed sparrow.

Founded St. Paul's School in Concord, New Hampshire.

Rev. G. Shattuck

1869: The first African-American, Edwin Howard, graduated from HMS.



1869

Calvin Ellis, dean from 1869-1883

1867-1883: Jackson Professor of Clinical Medicine.

Established first histological lab at HMS (on North Grove St.) Stimulated use of microscope at HMS.

Jacob Bigelow chose Ellis because "he can do the work of dean, which is chiefly clerical and mechanical."

Safely steered HMS through many years of change initiated by Harvard University President Charles Eliot, and this created much division within the medical school.

1871-1872: Ellis supported a new and systematic curriculum, in which students would have to pass all examinations before graduation. This meant replacement of repetitious two-year course with a graded three-year course.

Oversaw relocation of school from overcrowded North Grove Street quarters to new Boylston Street building in the Back Bay.

Calvin Ellis

J.C. Warren, Bowditch and Osler



1883

Henry Pickering Bowditch, dean from 1883-1893

Physiologist. The first HMS faculty member to restrict himself to research and teaching.

Early interest in anatomy revealed as freshman in college, when he erected skeleton of his father's dead horse.

He was among the first to set up a physiological laboratory in the US, using the Leipzig Physiological Institute in Germany as his model.

Was very vocal in defense of animal research: the principles of his arguments made against antivivisectionists are still used today.

Supported medical school reform. Wrote papers such as "Reform in Medical Education, and "The Medical School of the Future."



1893

William L. Richardson, dean from 1893-1907

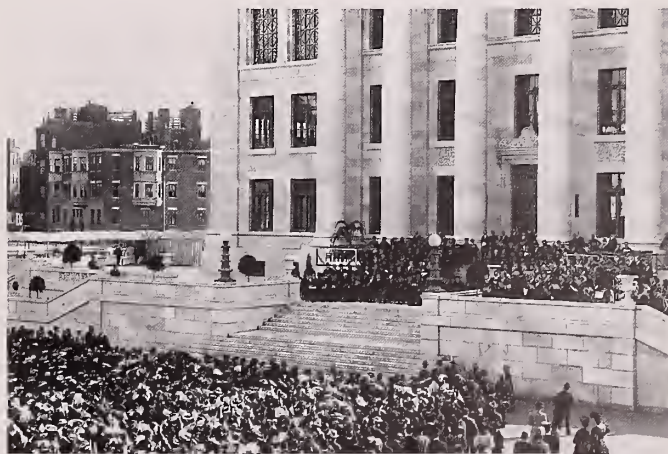
Professor of Obstetrics.

1873: Was instrumental in re-establishing the Boston Lying-in Hospital, which had been closed for 17 years.

Under his deanship, HMS moved to current home of Longwood Ave.

Prolific writer.

MGH and HMS on the Charles River, circa 1858



1906 dedication of the present campus.



1908

Henry A. Christian, dean from 1908-1912

Pathologist. Superb clinician.

First Hersey Professor of Theory and Practice of Physics at Peter Bent Brigham Hospital.

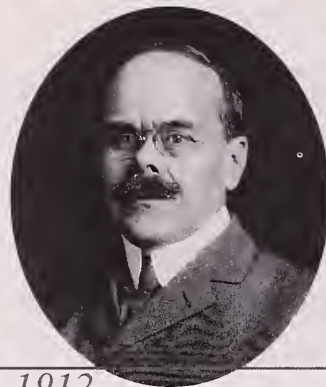
A follower of Oslerian dictum: "Observe, record, tabulate, communicate."

Famous for his meticulous keeping of patient records.

Received MD from Johns Hopkins. First dean whose early training was not at HMS.

Physician-in-chief of Peter Bent Brigham Hospital for 29 years.

Strengthened affiliations between HMS and other hospitals, such as Children's.



1912

Edward H. Bradford, dean from 1912-1918

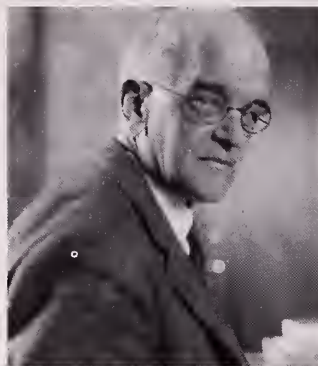
Dean when Peter Bent Brigham hospital was affiliated with HMS.

Surgeon-in-chief and orthopedic surgeon at Children's Hospital.

Established orthopedics as separate from surgery.

Founded the Industrial School for Crippled and Deformed Children in 1893 (first of its kind in America).

Dean when half the teaching staff left to do service related to the war.



1918

David Linn Edsall, dean from 1918-1935

Simultaneous deanships:

First full-time dean at HMS starting in 1923.

1922: dean of School of Public Health for 13 years.

1924: dean of Faculty of Dentistry.

Jackson Professor of Clinical Medicine.

First editor of Journal of Industrial Hygiene.

First non-Bostonian to serve as chief of medicine at MGH.

Changed "the primitive state of medical science," says Paul D. White in a foreword to *Pioneer in Modern Medicine* by Joseph Aub and Ruth Hapgood.

Interested in social medicine. Studied nutrition and metabolism. Preventive medicine was a recurrent theme in his work.

Raised capital funds for school from \$5 million to \$18 million.

Was recognized as a truly great figure in American medical education during an era of change.



1935

Charles Sidney Burwell, dean from 1935-1949

Famous quote to an HMS class upon graduation: "Half of what we have taught you is wrong. Unfortunately we do not know which half."

1949: Resigned to become Samuel Levine Professor of Medicine.

Cardiovascular disease specialist.

Scientific contribution: "Heart Disease and Pregnancy," co-authored by James Metcalfe.

Honorary curator of the Medical School Archives at Countway.

"Teaching and hospital work continued in tandem up to 1947. Then for two years, the deanship was a full time job." Boston Herald. June 1959.

Set up "Committee of Eight" which laid groundwork for closer affiliation of hospitals with HMS.

1945: First women admitted to HMS.



The Oscar C. Tugo Circle,
October 18, 1921
Longwood Avenue,
Boston, MA



1949

George Packer Berry, dean from 1949-1965

1953: "...Our preoccupation with scientific medicine has tended to let the patient fade into a faceless, nebulous creature, often no more than a number on a test tube or an entry on a chart. Such an attitude is not consistent with the best medicine..."

Professor of Bacteriology. Interested in mechanisms of viral illness.

Graduate of Princeton and Johns Hopkins.

Concerned with the health and well-being of students, Berry made outpatient and inpatient beds at the Brigham available to students. Also generated space for the Harvard Medical Health Care Center within the Brigham.

Enlisted medical school and the teaching hospitals in the care of patients at Veterans' hospitals.

Doubled the staff at the Brigham.

Doubled the endowment.

Built Countway Library of Medicine.

President of American Association of Medical Colleges.

Specialized in animal virology and immunology. Had four secretaries. Brought the affiliated hospitals closer together.



1965

Robert Higgins Ebert, dean from 1965-1977

Specialized in respiratory disease, especially tuberculosis.

1965: Also named Professor of Medicine and member of the Faculty of Public Administration.

Established MD/PhD program and began HMS/MIT Division of Health Sciences and Technology (HST) program.

Founded Harvard Community Health Plan, the country's first full-fledged academic health maintenance organization.

Led in the establishment of affirmative action at Harvard. Protested Vietnam War.

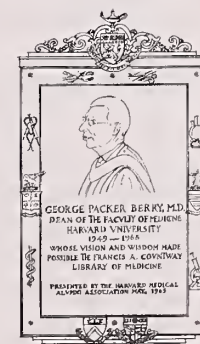
Sarah Jane Nelson is assistant editor of the Harvard Medical Alumni Bulletin.

Photo research was done by Madeline Mullin, curatorial associate in Rare Books, Countway Library of Medicine.

Professor John Dunlop congratulates Professor Robert H. Ebert at the dedication of the Harvard Community's Health Plan's Cambridge Center in Ebert's honor.



In protest of the Vietnam war.



The Francis A. Countway Library of Medicine



HMS June 1944

Two Decades as Dean

1977

DANIEL CHARLES TOSTESON '49 pointedly decided not to retire this year. He is "stepping down" as dean of the Harvard Medical School. As an indicator of how successful he has been at elevating the status of medical education and physician educators, you might even say that he is stepping "aside" to teach.

Tosteson will also be doing the things one might expect a dean emeritus to do: he will be president of the American Academy of Arts and Sciences the next three years, will spend more time on his research on cell membrane physiology, and do more writing. But it is not improbable to picture him also leading a small-group tutorial, with HMS students calling him "Dan," as he facilitates their discussion of a case.

A top priority since the beginning of his 20-year tenure as dean, says Tosteson, "was to strengthen and redirect our efforts at medical education." This is an understatement for what history now shows he did indeed accomplish with the New Pathway—transforming the way students learn medicine here. Figure the odds of such monumental change occurring in a traditional institution like Harvard Medical School. Many faculty members thought that the medical education program was already excellent and that there was no need to change. Somehow, he and a group of dedicated colleagues convinced enough faculty to translate a vision for change into reality.

Tosteson's interest in medical education began when he was a medical student, he says, and fermented as he was on the faculty at Washington

University School of Medicine (1958-61) and then at Duke University Medical Center, where he was chairman of the Department of Physiology (1961-75). He was involved in curricular reform at Duke and was in the embryonic stages of rethinking education at University of Chicago as dean of the Pritzker School of Medicine (1975-77) when he accepted the call from Derek Bok, then president of Harvard University, to return as dean of the Faculty of Medicine at the institution where he went to both college and medical school.

"My thinking about the problems with medical education evolved," recalls Tosteson. "The nature of the institutions with which I was involved were quite different and the nature of my thinking about what really needed to be done changed some too." Changes grew from "my initial idea that change should be encouraged to emerge from a closer interaction between students and faculty." Educational retreats, group discussions, a proposal to the annual educational workshop in 1982 and, in 1983, a 20-member faculty/student committee served to tease out the essential ingredients—the attitudes, skills and knowledge—of a general medical education. In 1985 the prototypical Oliver Wendell Holmes Society was launched and, starting in 1987, the entire school was learning the new path-way.

Did he ever think for a minute that it wouldn't happen? "Of course, there was always that possibility." He pauses. "But history is there!" He says he was helped by advice from a businessman who counseled him on organizational group dynamics in introducing

change. He also acknowledges help from Machiavelli. "There is a wonderful passage in *The Prince* where he comments that changing a human organization is the hardest thing anyone can do: those who favor change do so with certain skepticism and tentativeness because they are not sure if change will benefit them; whereas those who oppose are clear that changes won't benefit them and are, therefore, wholehearted in their opposition."

Though perhaps most visible to the outside world, the New Pathway was not the only change effected during Tosteson's tenure. The endowment has grown from \$138 million to more than \$1.1 billion, research funding has more than doubled, and virtually the whole Quadrangle campus has been renovated, with new buildings erected for state-of-the-art research and education. Basic natural science departments were reorganized to better reflect trends in molecular and cell biology (Genetics, Cell Biology, and Biological Chemistry and Molecular Pharmacology). And new departments were created to conduct formal research and education in the social sciences basic to medicine (Social Medicine and Health Care Policy) and to "address creatively and energetically issues raised by" other changes in the health care system (Ambulatory Care and Prevention, Rehabilitation and Physical Medicine, and a consolidated Department of Psychiatry).

Colleagues will be feting Daniel Tosteson in June [to be reported in the next issue of the *Bulletin*] for his accomplishments, leadership, vision and decision-making. But what does



photo by Christopher Little

he think? Does he think he is leaving Harvard Medical School better off than when he came? Perhaps predictably he responds, “no comment,” with a smile. But he does not hesitate to offer some things that he left undone.

“You never get everything done, at least I never do. As I commented in the *Bulletin’s* last issue [about the Harvard hospital mergers and consolidations], I feel strongly that the current state of organization of the clinical faculty is unsatisfactory and requires a lot of work. In regards to medical education, there is no end to the need for fresh thinking. The unbelievable growth of knowledge potentially pertinent to human health and disease in all directions imposes a need for continuing learning on every thinking person.”

The New Pathway cannot shake the “new” from its name no matter how many years old, perhaps in part because encouraging fresh approaches is a built-in dynamic. “As I often say about the New Pathway, it’s not a place, it’s a way,” says Tosteson. “It’s a way for students to learn how to learn and to sustain a lifetime of learning.”

Another goal of the New Pathway that is a battle not yet won, explains Tosteson, is for members of the faculty to “embrace the idea” that education is a legitimate and important field of research. “Figuring out how to devise experiences for beginners that will foster learning is an extremely complicated, challenging, never-ending set of issues that do not, in my experience, receive enough attention in the scholarly work of our faculty.” The teacher-clinician ladder for acade-

mic advancement started eight years ago is one innovation that has encouraged and rewarded such pursuit.

Tosteson walks through the Quadrangle buildings and sees how much more work is required. But finding the financial resources necessary to support this “great institution” will become harder, he says, as the capacity to subsidize activities from the clinical enterprise becomes more constrained as a result of managed care, just “to give some example of things that can constructively occupy the time of Joe Martin!”

But as to how he feels about wrapping up this phase of his professional life: “I don’t feel discouraged. It’s been a great experience. I’ve enjoyed enormously the opportunity to work with remarkably talented faculty. We have extraordinary students. It is a rare privilege to spend your life ministering to such a constructive community.”

Everything becomes symbolic near the end of an era. Tosteson spoke in April at the Soma Weiss Day assembly (“almost 50 years since the first Soma Weiss Day I attended”) and quoted from an essay by Robert Frost, whose portrait hangs in Tosteson’s office. In the essay, Frost explains that the “constant symbol”—in poetry and in all aspects of life, including science—is an initial image that begins a poem. Whether or not the poem works depends on whether that initial commitment is “strongly spent or weakly lost.”

“Using that frame of reference, I feel that I’ve spent as strongly as I can.”

Equally prideful is another accomplishment during his tenure: he (and

his wife, Magdalena Tosteson, who is a research associate in his laboratory) have ushered five children into adulthood. Heather is a writer at the CDC, writes poetry and fiction, and has a grown child of her own; Tor has two children and is a biostatistician at Dartmouth; Zoe, a musician and school counselor, is the mother of two and lives in Caracas; Joshua, who was only 5 when his father became dean here, graduated from Harvard College in 1994 and is about to start a doctoral program at Columbia; and Ingrid works in a day-care center in Boston. Step-daughter Carrie runs a United Nations mission in Namibia. Presumably he will now have more time for visits.

Tosteson is upbeat about the profession of medicine generally and the future of Harvard Medical School in particular. “This institution deserves the devotion and support of all of us. The opportunities available now and in the foreseeable future for our graduates and faculty to lead and to improve the quality of health care services available to people everywhere are unparalleled, unprecedented. If I had it to do all over, I’d love to do it!”

For years Tosteson sent off graduating students by saying, “The reward of a job well done is another job.” Now it’s his turn to go off to other jobs, on to his next chapter of lifelong learning.

Ellen Barlow is editor of the Harvard Medical Alumni Bulletin.

Into the Next Millenium

1997

IT IS IN THE MIDDLE OF JOSEPH Martin's week-long visit to Boston. Precisely at the appointed time, he welcomes me into the Building A conference room serving him for temporary headquarters as he prepares to become dean. With a light touch on the elbow, the soon-to-be former chancellor of the University of California at San Francisco, guides me to a seat and then relaxes into unhurried conversation about his plans for HMS.

"The highest priority is to have a visible presence in the hospitals, and in the next few weeks I hope to have a commitment from each of Harvard's major affiliated hospitals to open an on-site dean's office." Under Dean Tosteson a prototype of this relationship had already been established at the Beth Israel Deaconess Hospital, where Michael I. Rosenblatt is the executive director of the Harvard Medical School-Beth Israel Deaconess-Mt. Auburn Institute for Education and Research. Martin's project is both to expand and tighten links of this type between the medical school and its teaching hospitals. He noted that Tosteson's appointment of academic deans (Michael Rosenblatt, CareGroup; Eugene Braunwald, Partners; Philip Pizzo, Children's; David Nathan, Dana-Farber; and Thomas Inui, Harvard Pilgrim) at each major affiliate has facilitated this initiative.

To that end, he continues, "a key new appointment will be a senior dean for clinical affairs, someone with the personal authority to maintain a visible presence and to arbitrate disputes." As Martin talks about this appointment, it

becomes increasingly clear that his goal is not primarily to foster smoother bureaucratic ties between the medical school and the somewhat far-flung collection of hospitals where clinical education takes place. Rather, he sees the school and the hospitals as entering a time of perilous disunity, in which competition between hospitals for market share may undermine the sense of community essential for teaching and research. "My hope," he says, "is to hold everyone to a higher cause than competition for patients and not to divide academic programs along those lines."

In keeping with this philosophy, the new dean also intends to develop closer relationships between the research departments in the Quadrangle and researchers in the hospitals. "I believe such collaborative efforts will advance research more quickly and lead to improved treatments for our patients." In practical terms, this means that researchers' affiliations may increasingly cross boundaries between the two settings. In any event, maintaining the vitality of the core research departments in the Quadrangle remains high on Dean Martin's list of goals for his administration.

Turning to medical education at Harvard, the dean designate affirms the place of the curriculum reform that began under his predecessor. "The New Pathway is doing very well; it has developed an approach that should be sustained here. The case-oriented problem-solving approach to teaching has been adopted widely by medical schools in both the United States and Canada."

I recall that he had expressed some reservations about the New Pathway when he left Harvard for UCSF eight years ago. "At that time I was concerned about two aspects of the New Pathway as a general model for medical education," he replies. "First, although this type of teaching had been pioneered elsewhere, in some ways Harvard had the best opportunity to do solid research comparing the newer approach to more traditional methods. When the New Pathway was so rapidly extended to the whole class, that opportunity was lost. Although I understand why that decision was made, I still regret that we may never have another such opportunity to explore the differences. Second, the New Pathway is very labor intensive. Harvard may be able to sustain it; whether schools with smaller faculties can do so remains to be seen."

"Nevertheless, the New Pathway has become a central feature of medical education at Harvard, and a very desirable one for the students who come here. I support it and will endeavor to make it even more effective. I do hope that more of our basic scientists here at the Quadrangle will become engaged in teaching medical students. Both faculty and students benefit from such interactions."

The role of the academic societies, another recent innovation, seems less clearly defined to the new dean. "What do they mean to the community of students and faculty here?" he asks. "What do they accomplish? The philosophy behind the societies is sound. But I wonder how do students relate to the societies, particularly as they move to the hospitals in their

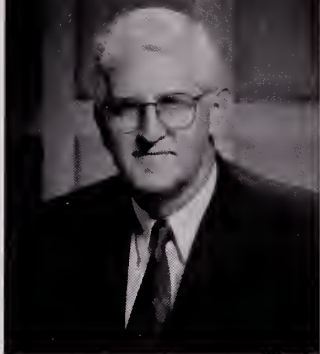


photo by Gabriel Moulin Studios

third and fourth years.” Gathering data to answer these questions will be another goal of his new administration.

From reflections on the inner workings of the medical school and the way it interacts with the clinical sites, the new dean moves to HMS’s presence in the world of medicine beyond the Quadrangle and Boston area hospitals. He cites Harvard Medicine International and the new Harvard Publishing Initiative with Simon and Schuster as examples of ways that the medical school can both provide services and enhance its presence on a broader stage.

This is the man who will take Harvard Medical School into the next millennium and who speaks comfortably and unaffectedly about its national and international presence. He seems to have come a long way from his origins in Duchess, a ranching and farming community 120 miles east of Calgary, Alberta, just at the end of the Great Depression. I express some curiosity about this journey and what made it possible.

“I wanted to be a doctor from the time I was four. I don’t know where the idea came from, because I don’t remember a time when I didn’t have it. From the beginning my parents were supportive, even though no one before my generation had gone to university. Also, the values I grew up with were behind such a choice; there was a great emphasis on being fair and honest, and on helping others get along. For me that translated into helping people who were sick. And although Duchess was remote in its way, it wasn’t isolated. Medical missionaries from

Africa and Asia came through town, and hearing them animated my ambition.

“Living in a rural area as it was coming out of the Depression meant that I learned how to do lots of things, like build an irrigation dam, frame a building, lay a trap line, or repair farm machinery. In summers during high school I was a grease monkey. But there wasn’t any question about my going on to university, and I was the first of ten or eleven cousins who all went to medical school.”

Joseph Martin received most of his college and his undergraduate medical training at the University of Alberta, although he took one year away from the intensive scientific training of his premedical curriculum to pursue a year of liberal arts at Eastern Mennonite College in Harrisonburg, Virginia, and it was there that he met his wife, Rachel.

After two years of internal medicine at the University Hospital in Edmonton, he began his neurology training at Case Western Reserve. Somehow, in a few closely packed years at the end of the 1960s, he picked up a PhD at the University of Rochester and taught at the University of Connecticut before beginning his first major academic stint at McGill University in Montreal. There in eight years he rose from assistant professor in the department of neurology and neurosurgery to become professor and chairman.

Then, in 1978, he came to Boston, Harvard and the Massachusetts General Hospital, where he led the neurology department and for ten months also served as interim general

director of the hospital. After 11 years at the MGH, Martin moved to the University of California at San Francisco, first as dean of the school of medicine and then, in 1993, as chancellor.

I comment on the amount of movement in his career and offer a stereotype: a young man from a rural area might be expected to stick close to home. Martin politely considers this thought and observes that moving runs in the family; his grandfather began in Pennsylvania but moved to California before settling in Alberta. Then he smiles and adds that Harvard feels a lot like home to him now. ❖

William Ira Bennett '68 is a psychiatrist on staff at Cambridge Hospital and the editor-in-chief of the Harvard Medical Alumni Bulletin.





A Tragedy of Addiction

by *Morris A. Fisher*

IT HAS BEEN TWO YEARS SINCE THE death of my 24-year-old son. Bruce killed himself by a shotgun blast to the head. That was the immediate cause. My son was an addict, not addicted to a "street drug," but rather a drug prescribed legitimately for an established purpose. He therefore had what is probably the most common form of addiction.

Bruce had migraine. He came by this naturally since both his mother and father have migraine. Although varying in intensity, his headaches were frequent, often disabling and refractory to treatment. During a year of transition after graduating from college, his headaches worsened. I referred him to a respected colleague who prescribed a then newly-introduced synthetic opioid promoted heavily for the treatment of migraine, Stadol® NS (butorphanol nasal spray). In retrospect, my son rapidly became addicted. About one and one-half years later he killed himself in a moment of pain, despair and shame. This too is common.

The loss of a child is particularly wrenching—a limb rudely ripped away. Only now can I think more about his life than his death. The joy at his first smile and step. His crawling over the stacks of EEGs I would read at home. He was a bright, imaginative child who could read without formal instruction. He was outgoing and uninhibited and spoke to adults as if he were their equal and assumed that they

would feel the same about him.

In high school his activities ironically included working with a group dedicated to decreasing drug use. His happiest years were at college, where he did well academically and followed a family tradition by majoring in history. After college he was employed by his college's admission department and volunteered at the local public defender's office doing investigative work. It was in the middle of this year that he was prescribed Stadol. I recall that he mentioned the unusual "buzz."

The rest seems to have followed inexorably like a Greek tragedy. As the focus of Bruce's life became obtaining the medicine to feed his addiction, his functioning declined. Issues such as productivity, keeping appointments, and providing supplemental income became problems. Place and friends had always been important, yet he matriculated at a law school in an unfamiliar environment where he knew no one. He became increasingly obsessed with guns, a subject he pursued with his usual thoroughness. With hindsight we recognize this gave him a sense of power and control in the face of helplessness with his addiction.

Bruce finished his first year of law school, but barely passed. He was unable to function effectively even in relatively menial jobs and was largely isolated from his friends. We subsequently learned that he would call a friend many times a day in an attempt

Photo by Stuart Darsch

to establish contact and then engage in rambling conversations without addressing his problems.

I am a neurologist and have managed patients with migraine throughout my professional career. Although I was involved only marginally in my son's care, I was not uninterested. I had reviewed the literature and even attended a promotional session sponsored by the manufacturer, Bristol-Meyers Squibb. I had no reason to expect my son's course.

Even as a physician I was ignorant of the manifestations of addictions. Despite the high incidence of addictions and the even higher incidence among medical personnel, this was not taught in my years at Harvard Medical School and there is relatively little discussion of this topic in the medical community. I have since become more knowledgeable. My son's course followed established patterns. This information would have at minimum ameliorated the horror of the unknown as my son deteriorated.

The nightmare of a loved one with an addiction is difficult to convey: the

dissolution of the personality, the seeming futility of the efforts at help, and the inability to establish meaningful communication. As we began to suspect that he had a problem, he consistently assured us that he could control his medication use, but had confided to our younger son that if we knew about his addiction he would kill himself. We found out and subsequently he did.

Bruce's medical care included neurologists, psychiatrists, internists and psychologists. Although claiming Stadol was his "friend," he recognized its increasingly harmful effects and agreed to seek additional help. He killed himself during a program of withdrawal under the supervision of one of the most respected physicians dealing with addictions in the Chicago area.

After my son's death my need to understand the professional issues about Stadol became imperative. This allowed me to deal partially with my grief by engaging in a "uses of time" for which I was trained. I was fortunate to have the interest and help of a

"The nightmare of a loved one with an addiction is difficult to convey."

niece, a professional investigative reporter. Meaningful information about the drug and its regulation can only be obtained through the Freedom of Information Act (FOI). The results of gathering this information are presented in detail elsewhere (Fisher MA, Glass S: Butorphanol (Stadol) - a study in problems of current drug information and control. *Neurology*.1997;(5) 48:1156-1160)

The findings, if not elevating, are predictable. Drug companies are commercial entities. Although Bristol-Meyers Squibb has consistently referred to Stadol as an opi-

The Power of Intervention

by William D. Clark

Sadness, shock and dismay surfaced simultaneously and I cried when I read Morris's initial letter to me some months ago. We've had little contact since 1965 ceremonies on the Quadrangle, but I quickly agreed to Morris's request to help him educate others about addiction issues. I related to his story as a father, friend, internist, and as an addiction specialist.

Indeed, Morris has been in a tragedy, and did what a father should do: stayed in contact with his son, found expert help, supported him all the way. His son's helpers apparently did well, also: regular sessions, a programmed and supported withdrawal, and attendance at AA. It is the ultimate human

lesson that right actions do not reliably assure a right outcome. But might aspects of this story teach us additional lessons about addictions and doctoring?

My classmate came up against the prototypical biopsychosocial illness, drug addiction. Addictions tightly entangle physically as well as psychologically the mind, body and spirit of the person within powerful social currents. How can a doctor in a high-tech medical system untangle these intertwined, not so high-tech elements? Whose "job" is it to intervene? Let's briefly explore some of these issues.

First, the drug matters and some drugs are worse than

others. Only ten percent of people who drink, or use cocaine or heroin stimulate the CNS "reward or pleasure" centers sufficiently to reorganize neurotransmitters (dopamine, endorphins, and others) such that abstinence can seem intolerably burdensome. But two-thirds of those who experiment with more than a few packs of cigarettes become physiologically dependent.

Pentazocine (Talwin®, related to Stadol) was introduced as chemically distinct from previous narcotics and "nonaddicting," but not for long; I recall the bizarre symptoms and withdrawal syndromes that appeared. How quickly it fell into disfavor.

oid, it is an addictive narcotic whose safety has always been disputed. Stadol is in the same class as pentazocine (Talwin), another “safe” narcotic introduced during my professional career, now tightly controlled due to its addictive properties.

When Stadol was first introduced as an injectable preparation in 1978, the Drug Abuse Advisory Commission (DAAC) of the Federal Drug Administration (FDA) voted overwhelmingly to schedule Stadol, not only to regulate its use but also as a cautionary warning to both patients and physicians about its abuse potential. The recommendation of the DAAC, however, was not followed by the FDA. Discussions regarding these types of decisions are not available through the FIO. The main spokesman for the drug company, however, had both invented Stadol and held patents on the drug. An argument presented forcefully by the manufacturer was that continued production and support for the development of drugs such as Stadol was dependent on the promise that it would not be scheduled as a

narcotic.

Following release, use of Stadol was limited because it could be given only by injection. There were reports of abuse, while discussions continued in DAAC meetings about the safety of Stadol and the need for additional information. In 1989 Bristol-Meyers Squibb submitted a new drug application for Stadol as a nasal spray, which was approved for release without Federal controls in December 1991, despite concerns that there would be increased availability with the nasal spray. Approval was partially based on the absence of previous scheduling. It was stipulated that Stadol not be used chronically, and the manufacturer was to provide post-release surveillance.

With the release of the nasal spray, Bristol-Meyers Squibb initiated an advertising campaign for Stadol emphasizing its use in migraine, a condition in which long-term, repeated (i.e., chronic) use of a medication might be expected. Advertisements emphasized the safety of Stadol and indicated that it was not a federally scheduled drug. Material directed to

“Like it or not, the interaction among drugs, people and society is a doctor’s business.”

— William D. Clark

patients supported the use of Stadol for “moderate” migraine pain and did not mention the abuse potential. Based on personal experience in meetings and teleconferences for physicians, the manufacturer advocated Stadol for migraine without mention of its addictive qualities.

Soon after release of the nasal spray there was a dramatic increase in reports to the FDA of Stadol addiction/dependence. Within two years these reports prompted the FDA to

My professional experience with butorphanol (Stadol) echoes Morris’s son’s. It is an effective and rapid pain reliever. And many patients quickly become unable not to use it. Withdrawal is more difficult than from other opiates used for headache relief. Likely, the nasal route as well as the specific receptors and neurotransmitter pharmacology are relevant here.

Then too, the host matters, and solid data from diverse sources (from molecular biology to anthropology) support the notion that humans are far from uniform in regard to how quickly our brain reorganizes, or how our nucleus accumbens and related hippocampal areas produce the pleasures, as well

as the urges and cravings. Other host differences include the intensity of dysphoric side effects, or the nastiness of hangover, and so on. In some part, these are genetically determined.

And finally, what is happening in society matters. For example, cocaine has been around a long time, and the recent epidemic is related to factors such as ease of transport, government rules, and the need for other countries to have a high-profit export product. And it is again hip to rebel and try new things. Prevention efforts lose effectiveness as the perception of imminent danger decreases.

As for Stadol, not only is it

legal, but respected doctors prescribe it. Migraine is as intractable as ever, and relief of pain is a high priority.

But the responsible professional who practices evidence-based medicine will find that randomized and controlled high-quality research demonstrates that doctors can do a lot about addictions. All that is lacking for us to do better is a sense of mission and efficacy. Like it or not, this aspect of the human condition—the interaction among drugs, people and society—is a doctor’s business.

Data repeatedly show that simple screening (like the CAGE test, and “Have you had occasion to use other drugs, or ever

misused prescription drugs?”) is effective. Yes, some cases will remain hidden until tragic consequences accrue. But one can help relieve suffering almost as well by screening for addiction as by using the algorithm for the acute abdomen we learned at HMS. Unlike with the abdomen, however, diagnostic accuracy (“getting it right”) is less important than curiosity (“getting it out in the open”) and relationship (caring about the person).

Purposeful, respectful human contacts about embarrassing or secret matters help move people to change, even if the contact is quite short. In the office, such an abbreviated inquiry, show of support, and naming of resources is called a

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solicit information from state agencies throughout the United States about their experience with Stadol. The replies indicated a widespread problem, including the use of Stadol “on the street.” At the same time the FDA was querying the states, the manufacturer was testifying to state pharmacy boards that there was no evidence for “meaningful” abuse.

“brief intervention.” Extensive research shows the success of this approach for alcohol (JAMA.1997;277:1039-1045). Other drug problems share the psychological dynamics, which suggests that simply helping patients to confront these matters in a nonjudgmental atmosphere is crucial to success.

Is the drug distributor for Stadol a “pusher,” the villain of this story? Is Bristol the prescription-drug equivalent of the tobacco companies? In an increasingly materialistic society with intense attention to the bottom line, the notion that Bristol might ignore reports of tragedy until the last possible moment seems completely believable. We must remain vigilant and support the FDA

The Drug Enforcement Administration initiated review of prescriptions for Stadol to analyze the patterns of use (or abuse). The FDA began procedures for scheduling Stadol at the federal level, and currently, in addition to Oklahoma, which had scheduled Stadol as a narcotic since its FDA release in 1978, Stadol is now a scheduled narcotic in at least seven other states. The FDA has recommended to the DEA that Stadol be scheduled at the federal level, and this is in process.

After Bruce’s death, contact with colleagues in addiction medicine was informative and helped put my experience in perspective. The history of addictive drugs in the United States is that they are introduced as “safe” and supported by the medical community. Subsequently there are problems in patients, medical professionals and finally “on the street,” resulting in regulation. In general there is a lack of knowledge and concern about addictions. One headache specialist who supported the use of Stadol stated to me that misleading advertising was not

and its efforts to develop an objective perspective for our citizenry. We owe Morris thanks for his efforts to untangle the truths about Stadol.

Morris’s own tragedy continued to unfold despite his concern and the assistance of seasoned professionals, just as my recent patient died of delirium tremens despite our best efforts. Nonetheless, each of us can learn to better intervene and avert future tragedies. Attend to these lessons.

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his concern and that the appropriateness of the unscheduled status of Stadol was strictly a matter for regulatory agencies. At the end of our conversation he informed me that he lectured about Stadol for Bristol-Meyers Squibb.

After my son’s death we learned that he had made a previously unsuccessful attempt at withdrawal while at law school. He had probably lost faith in the possibility of meaningful help. His last words to my wife were that he loved her.

About two months before his death I called Bristol-Meyers Squibb for advice about managing Stadol addiction. I was able to speak to someone only with difficulty and then informed that my son was not addicted since he was not taking an absurdly large dose. Subsequently I received an adverse drug report form from the company that required patient identification, which cannot be done without the patient’s permission. It is doubtful that addicted patients, including my son, would give such permission.

My next contact with Bristol-Meyers Squibb was several days after his death. A letter asked why I had not submitted the adverse drug report. I wrote them that my son had killed himself due to his addiction. I have not received a reply.

Life without my son has a gray hue. I miss his spontaneity, passion and imaginative intelligence. I miss the funky telephone answering messages, the multiple bowls of cereal for breakfast, the knowledge that someone cares about me. I am more empathetic and understanding, but the price for this personal growth has been too high. The search for the positive remains elusive.

Generalizing from an individual experience can be hazardous. If adequate information had been available about Stadol, however, my son would be alive. The issues are particularly relevant at a time when essentially the only funding for drug research and information is from the pharmaceuti-

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cal companies. The current situation puts both patients and physicians at risk, which for physicians includes legal vulnerability. The drug manufacturers are relatively well protected. No one, including the drug companies, will benefit if there is a general perception that meaningful information about drugs can only be obtained through the Freedom of Information Act.

Simple measures could correct this. Adverse drug reports to the FDA should be available on-line, providing a readily available source of information about drugs other than that provided directly or indirectly by the manufacturers. Since the true effects of a drug are not known until after FDA release, objective post-release surveillance should be routine. As I understand it, both of these proposals would be supported by the FDA and provide a better balance of information available about drugs. A tragedy with Stadol and future "stadols" need not recur. ❧

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Crafting New Lives

by Lakshmi K. Halasyamani



photos courtesy of Lakshmi K. Halasyamani

ON A RECENT TRIP TO SOUTH INDIA I spoke with women who are meeting the challenges of oppression in a country where historically women have been viewed as inferior to men. Through community-based cooperatives, these women have demonstrated tremendous courage in overcoming social norms and are showing how economic independence is a first step in gaining control of their lives and health.

As an Indian-American woman in medical school, I became interested in the health issues of Indian women. I traveled to Madras, South India and using semi-structured interviews, learned how domestic violence and spousal alcohol use influence Indian women's lives. Later, as a Yousef Karsh Clinical Scholar in primary care/internal medicine at Brigham and Women's Hospital, I spent six weeks in Vellore, South India investigating the prevalence of domestic abuse, and learning about community-focused initiatives that enable women to become self sufficient and ultimately more healthy.

The Community Health and Development Program (CHAD) is part of Christian Medical College, a premier teaching and tertiary care center in India. For over 40 years CHAD has provided health and social services to the community of Kaniyambadi "block," which encompasses many rural villages surrounding Vellore. They provide health services for all ages in outpatient clinics and small inpatient wards and through regular medical van excursions that reach villagers who cannot travel to the central hospital.

In addition, they have recognized the intrinsic connections between women's health and poverty, and have developed community-based cooperatives that train women in various crafts, enabling them to become heads of their households and redefine their roles as individuals. The voices, stories and accomplishments of these women are rarely heard. I was privileged to



hear them describe their experiences and was moved by the courage they exhibit on a daily basis.

Throughout her life an Indian woman's role is defined only in relation to men: as daughter, wife and mother. Although women have always contributed to the economies of their communities through physical labor, care of children and maintenance of households, this work is not recognized as income-generating.

From childhood, girls receive inferior medical care and fewer educational opportunities. In fact, with the development of amniocentesis and ultrasound, gender-based abortions are even more common than before. When a daughter reaches the time to marry, families must pay enormous dowries to the groom and his family. The daughter is then chastised by her own family as she has burdened them with debt, and after the marriage, is often mistreated by her husband and his family because her dowry was inadequate. Some women face abuse, or their husbands abandon them and their children. In the worst scenario I heard, a woman was doused with kerosene and set aflame, with her death reported as an accidental kitchen fire.

Many men use their incomes to purchase alcohol, leaving very little for food and other necessities. Women who are single or separated are ostracized further, as society views them as failures in maintaining a household and the semblance of harmony.

Similarly, sometimes the community mandates harsh restrictions on a widow's behavior, such as not letting her leave her house, and she is left unprotected and without any economic security. Very few have the support of their own families, who themselves are struggling.

The craft centers began in 1974. Women were recruited by village health workers and taught to make palm leaf baskets. Although skeptical at first, these women gradually became interested as they earned wages that were their own. In 1978 the Community Development Society (CODES) organized groups of women in villages throughout Kaniyambadi block into cooperatives based on the crafts the women produced, which also include carpet weaving, batiks and embroidery.

One of these groups became its own independent society—Self Help and Rural Employment (SHARE). The primary craft at SHARE is palm leaf projects, which are now exported and sold through international agencies. Although currently successful, there were difficulties initially. As women gained economic means of their own, their voices in their households became more prominent, something the men of the community had not



anticipated. One craft center was burned by those who felt that these projects had given women too much freedom.

But the women just rebuilt the center and initiated other basket-making sites. SHARE has now grown to reach women outside of Kaniyambadi block, and currently includes over 700 participants.

In 1989 the government took over the management of many of the cooperatives inside Kaniyambadi block and CODES subsequently became an export cooperative. For the last few years CODES has again organized grass-roots craft centers and developed welding, tailoring and embroidery units. I spoke with women in the tailoring and embroidery units to learn the impact of these cooperatives on their lives.

Gnanam and Indra are clearly the leaders of their unit, teaching women how to make various patterns with straight seams and flawless finishing. They come from Arni, a village about 45 minutes away. Their days begin at about 4:30 a.m., as each has specific household chores that need to be completed before they can begin their work at CODES.

Gnanam is 35 years old. After one

month of marriage her husband was killed in a scooter accident. Although Gnanam was able to read and write, she was not prepared to support herself. She and her widowed mother moved in with her older brother and his family. This lasted for a few months until he told her he could not support her and "amma" anymore. "I never imagined my life this way without a husband and living in a place with only my mother . . . At first I was afraid, but then realized we had no other choices, so what else could I do . . . I had to find a way for us to live," remembers Gnanam.

In the tailoring unit women make baby frocks, diapers, blankets and surgical gowns. These supplies are purchased by the main hospital and used in the newborn nurseries and operating rooms. A core group of about 10 women work at the craft center daily, with others coming for training and to submit items they have stitched at home. The amount of income they make is determined by the volume of goods they produce. Many women can only do their stitching late at night after the household chores are done and the children are asleep. Their reasons for seeking out CODES are differ-

ent, but in coming together these women have formed a support group.

After a month of training Gnanam mastered the patterns and is now the financial manager and one of the teachers for her unit. By no means is her life easy, but she now supports herself and her mother. "We have enough and have learned to adjust. For so many who have husbands, they [the husbands] are just a problem anyway, and still we [wives] have to bear the responsibility. Sometimes the men in the area become jealous because we are making money, but we do not waste what we make; instead, we use it for our families."

Indra sought out the tailoring unit at CODES because she knew how to sew and her family was without regular income. Indra is 28 years old and by local standards should have been married years ago. She says there has been no suitable bridegroom. Her elder sister was married to a cousin because the family thought he would look after her well. Instead, he abandoned his wife and two children, who now live with Indra's parents. "After this, no one is in much of a hurry for me to get married. I am not bothered because I see very few who are married and happy," says Indra.

Not everyone who enters the training completes it, but for women whose sources of income are nonexistent it serves as an invaluable resource. In many ways literacy is a goal that can be achieved only after there is economic security. Comments one woman, "When am I supposed to learn to read and write? I wake early each morning, cook and send the children to school. Then I have the wash and the rest of the household chores. I come here because I can learn a trade quickly and can then begin to make some money for my family."

Unlike the tailoring unit, the embroidery unit is in an earlier stage of development. Compared to sewing, something many Indian women have done as part of their daily lives, embroidery is a luxury that many poor

women have never had time to learn. The goal of the training is to teach the women over 30 different stitches to be used to decorate items that can be sold in gift shops in the nearby city of Madras. Many pay substantial bus fare each day to participate in the training. "All I hope is that at the end of this training I will have a job," says one woman. "I do not know what I will do if there is no employment for me."

Susikala is a shy woman who does not say much. Her left arm is marked by a deep, broad scar that runs from above her elbow down to her wrist. "My husband did that with a hot iron 15 years ago," she says. Prompted by the others to tell me her story, she whispers, "He left me 12 years ago." There is tremendous shame in her voice because she has been abandoned by her husband. Although he was clearly abusive to her, she is afraid the other women will view her as a failure. Since his disappearance, Susikala has lived with her mother and two children and is responsible for providing

"There is tremendous shame in her voice because she has been abandoned by her husband."

income for the household. She does not know how to read or write and is depressed because she had hoped that her children would have a better life than she does.

She explains, "I could not keep them in school. The schools want notebooks for each subject and uniforms. It costs almost 2000 rupees [\$60] to send each to school. Initially I tried to keep my son in school, but I could not send him this year." She heard that other women make a rea-

sonable living through CODES and wants to have that chance. "I would have taken poison a long time ago, but if I do that, who will take care of my children? I am alive and I try for them."

Even those who have husbands find that a single income is inadequate to send their children to school, with education viewed as the only way out of poverty. Premila and Saroja both come to the training center to keep their children in school. "Our husbands have coolie jobs [menial labor tasks compensated on a daily basis] and the prices of dhal and rice are too much. We want to learn to stitch so our children can come up in life," they explain.

Attendance is recorded daily, and each day new stitches are taught. If a woman misses a session, she must learn the patterns on her own or from others in the group. "I have come today even though I have had fever for three days," says one woman. "If I don't come then they [the other





women] will all move far ahead of me and I will not be able to catch up and will not get employment.”

The economic fruits of the women’s work in the embroidery unit are yet to be seen, but these women exhibit tremendous faith in the CODES project and craft centers as a way to earn income. Furthermore, for these women whose days are filled with work, often done in unsupportive and lonely environments, the training centers are places of companionship and camaraderie. For a few hours they can forget their daily hardships and focus on the goals they want to achieve as individuals and as a unit.

Gnanam, Indra, Susikala and many others are attempting to overcome social and economic obstacles while they bear the burden of work for their own survival and that of their children and families. From their efforts come courage and inspiration. They have broken the chains of a rigid social

structure that has taught them to think of their lives as unimportant. Economic independence becomes a tool with which they reclaim their lives and that of their families. They are generating more than just income; they are generating a new way of life and health. ❀

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